



## FIȘA DISCIPLINEI- MODUL ENGLEZA

### 1. Date despre program

1.1.	<b>UNIVERSITATEA DE MEDICINĂ ȘI FARMACIE “CAROL DAVILA”</b>
1.2.	<b>FACULTATEA - MEDICINĂ/ DEPARTAMENTUL - Second Department- MORPHOLOGICAL SCIENCES</b>
1.3.	<b>DISCIPLINA - ANATOMY - ENGLISH TEACHING MODULE</b>
1.4.	<b>DOMENIUL DE STUDII - HEALTH</b>
1.5.	<b>CICLUL DE STUDII: GRADUATE STUDIES</b>
1.6.	<b>PROGRAMUL DE STUDII: MEDICINE</b>

### 2. Date despre disciplină

2.1.	<b>Denumirea disciplinei : ANATOMY</b>						
2.2.	<b>Titularul activităților de curs -</b>						
	<b>Titularul activităților de seminar:</b>						
2.4. Anul de studiu		2.5. Semestrul		2.6. Tipul de evaluare		2.7. Regimul disciplinei	
I		I,II		Practical and multiple choice examination		Fundamental Science	
II		III,IV		”		Fundamental Science	

First year Anatomy

### 3. Timpul total estimat (ore/semestru de activitate didactică)

3.1. Nr ore pe săptămână	8-sem I 6-sem II	From which : 3.2. course	2	3.3. practical session/ lab	6-sem I 4-sem II
3.4. Total ore din planul de învățământ	196	From which : 3.5. course	56	3.5. practical session/ lab	140
Distributia fondului de timp	28 weeks				ore
<b>Studiul după manual, suport de curs, bibliografie și notițe</b>					
<b>Documentare suplimentară în bibliotecă, pe platformele electronice de specialitate și pe teren</b>					
<b>Pregătire seminarii / laboratoare, teme, referate, portofolii și eseuri</b>					
<b>Tutoriat</b>					
<b>Examinări</b>					
<b>Alte activități</b>					

<b>3.7. Total ore de studiu individual</b>		
<b>3.9. Total ore pe semestru</b>		
<b>3.10. Numărul de credite</b>	First Year - 13 credits	

#### 4. Precondiții (acolo unde este cazul)

<b>4.1. de curriculum</b>	Not applicable
<b>4.2. de competențe</b>	Not applicable

#### 5. Condiții (acolo unde este cazul)

<b>5.1. de desfășurare a cursului</b>	Not applicable
<b>5.2. de desfășurare a seminarului / laboratorului</b>	Not applicable

#### 6. Competențe specifice acumulate

<b>Competențe profesionale (exprimate prin cunoștințe și abilități)</b>	<ul style="list-style-type: none"> <li>• Structural and developmental description and recognition of representative human anatomical elements - bones, muscles, vessels, nerves-as guideline for clinical diagnosis</li> <li>• Application of techniques methods and acquired anatomical knowledge, in order to establish the diagnosis, to elaborate the scheme of treatment, to identify the most effective prevention measures for diseases</li> <li>• Elaboration of a research project for a given study subject, with the investigation and description of anatomical structures</li> </ul>
<b>Competențe transversale (de rol, de dezvoltare profesională, personale)</b>	<ul style="list-style-type: none"> <li>• Identification of objectives wanted to be achieved, of available resources, of their terms of completion, of working steps and time, of their deadline and of the associated risks in various pathologies.</li> <li>• Identification of roles and responsibilities in a multidisciplinary team, applying of techniques for effective work and relationships in the team and in relation to the patient.</li> <li>• Effective use of information sources, of communication resources but also of the professional aided training resources (internet portals, specialized software applications, databases, on-line courses...) both in Romanian and international languages.</li> </ul>

#### 7. Obiectivele disciplinei (reieșind din grila competențelor specifice acumulate)

<b>7.1. Obiectivul general</b>	- Familiarization with the university studying by means of anatomy, as one of the first medical subjects that is studied. Progressive knowledge of the anatomical composition, by gradual learning of the human body systems. Observance of professional values and ethics.
<b>7.2. Obiective specifice</b>	Apart from knowledge gaining about each anatomical element, the anatomy aims are to develop the spirit of observation, the capacity of analysis and synthesis, but also to initiate into clinical application of the acquired information. The anatomy is the first medical subject that the students come in contact with and it has an important role in training of a physician/doctor, irrespective of his future medical specialty.

## 8. Conținuturi

8.1. Lectures 1 <sup>st</sup> year, 1 <sup>st</sup> Semester	Metode de predare	Observații
1. - Introduction. Anatomy study objects. 2.- Ovogenesis and ovulation. 3.- Fecundation. Implantation. Cleavage. 4.- Evolution in the second and in the third week. 5.- Derivatives of the germ layers. 6. Fetal period. Embryonic annexes. 7. Embryonic annexes - Placenta. 8. Development of the limbs. Development abnormalities. 9. Notions of biomechanics. Classification of the joints-means of hinging, means of gliding. 10. Superior limb joints (shoulder) 11.Superior limb joints (elbow, radio-ulnar joints, radiocarpial joint) 12.Lower limb joints (Hip joint) 13. Lower limb joints (knee joint, talocrural joint) 14. Radioanatomy and cross sections course	Courses are taught in lecture halls (amphitheaters) and rooms that are technically equipped for this main purpose -laptop, projector. All lectures are updated, according to the reference books, journals, to books published by members of our discipline, but also to the new data online published-PowerPoint presentations, schemes, drawings. Our discipline has its own library to obtain medical information for useful university studying by means of anatomy.	
8.2. Lectures 1 <sup>st</sup> year, 2 <sup>nd</sup> Semester	Metode de predare	Observații
1. Development of the neurocranium and vicerocranium. 2. Development of the face-development abnormalities 3. Branchial region, the pharyngeal pouches-evolution, derivatives. 4. Temporomandibular joint- articular surfaces, means of joining, means of gliding. 5. Oral cavity- walls, content, blood supply, lymph vessels, nerve supply. Teeth- structure, deciduous teeth, permanent teeth, group features. 6. - Pharynx 7. - Larynx 8.- Development of the respiratory system 9, 10 - Development of the heart and of the great vessels 11.- Heart innervation and functional conductivity pathways. 12. Coronary circulation. 13.- Topography of thoracic organs. 14.- Radioanatomy and cross sections course.	Courses are taught in lecture halls (amphitheaters) and rooms that are technically equipped for this main purpose -laptop, projector. All lectures are updated, according to the reference books, journals, to books published by members of our discipline, but also to the new data online published-PowerPoint presentations, schemes, drawings. Our discipline has its own library to obtain medical information for useful university studying by means of anatomy.	
<b>Bibliografie</b> Gray's Anatomy – for students, by Richard Drake, PhD and all , Elsevier Health Gray's Anatomy – pentru studenți, Coordonator F.Filipoiu, Editura Elsevier – Prior, București Atlas de anatomie – nomenclatura latină – Gilroy, Coordonator F.Filipoiu, Editura Prior, Bucuresti Aparatul digestiv subdiafragmatic și splina – sub redacția Florin Filipoiu, Editura Universitară “Carol Davila” București Anatomia omului - Aparatul urinar, spatiul retroperitoneal, F. Filipoiu, C. Cristescu, D. Mihalea, Editura Universitara “Carol Davila”, București Anatomie – Pereții trunchiului – Lucrări practice sub redacția G. Lupu, Editura Universitară “Carol Davila” București Anatomia omului – Cap și Gât – Lucrări practice sub redacția G. Lupu, Editura Universitară “Carol Davila” București		

Anatomia omului – Aparatul digestiv – Lucrări practice sub redacția G.Lupu, Editura Universitară “Carol Davila” București

Anatomie – Membrele sub redacția G. Lupu, Editura Universitară “Carol Davila” București

Editura Universitară “Carol Davila” București sub redacția Al .T. Ispas Anatomia omului – Aparatul Genital

Anatomia omului – Sistemul Nervos Central – Lucrări practice, sub redacția Al.T.Ispas, Editura Universitară “Carol Davila” București

Sistemul nervos și organele de simț - Atlas color – Werner Kahle – Coordonator Prof. Al.T. Ispas, Editura Callisto București

Anatomia funcțională a toracelui - Cezar Th. Niculescu, Bogdan Voiculescu, Romică Cergan, Mihaela Banu, Editura Universitară “Carol Davila” București

Embriologie – Ghid de lucrări practice de microscopie An I – sub redacția Al. T. Ispas, Editura Universitară “Carol Davila” București

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8.3. Seminar / laborator	Metode de predare	Observații
8.3.1. Lectures 1 <sup>st</sup> year, 1 <sup>st</sup> Semester	Metode de predare	Observații
<ol style="list-style-type: none"> <li>1. Axes and orientation planes of the body.</li> <li>2. Vertebrae: general vertebral features; cervical, thoracic, lumbar vertebrae. Particular               <ol style="list-style-type: none"> <li>a. vertebrae; transition vertebrae. Sacrum and coccyx.</li> </ol>               Vertebral column –curvatures. Surface anatomy: the palpation and counting of the vertebrae; anatomic coordination points for the lumbar puncture. Radiological anatomy. Sternum. Ribs. Osseous thorax. Surface anatomy of the thoracic wall: orientation lines, osseous and muscular reliefs; counting of the ribs. Radiological anatomy.             </li> <li>3. Clavicle, scapula, humerus. Radius, ulna, skeleton of the hand. Surface anatomy and radiological anatomy of the upper limb.</li> <li>4. Hip bone, skeletal pelvis. Surface anatomy: internal and external pelvimetry Femur, patella Tibia, fibula, skeleton of the foot. Surface anatomy and radiological anatomy of the lower limb.</li> <li>5. EXAMINATION</li> <li>6. Elementary notions of dissection. Dissection of the muscles connecting the upper limb with the vertebral column and of the muscles connecting the ribs to vertebrae:- latissimus dorsi, trapezius, levator scapulae, rhomboids, serrati posterior. Surface anatomy; weak points of the posterior</li> </ol>	<p>The main purposes of teaching methods are</p> <ul style="list-style-type: none"> <li>-recognition, but also structural and developmental description of the studied anatomical structures</li> <li>- understanding and development of skills in clinical using of acquired anatomical knowledge</li> <li>- development of logical , causal thinking in medical studying...</li> </ul> <p>The teaching methods for anatomical study: -dissections of human bodies, presentations on anatomical dissected parts, anatomical preparations, bones, sections; -microscopic examinations of histological sections-human embryos and fetuses- at practical sessions of embryology; radiological anatomy with examination of radiographies; - documentation in our discipline museum, study on cross-sections of human body, study on normal x-rays, CT and MRI</p>	

abdominal wall-the lumbar triangle of Petit, the lumbar tetragonal of Grynfelt; the pentagon of Krause

Dissection of the nuchal region. Suboccipital muscles, vessels and nerves. Surface anatomy: anatomic coordination points for the anaesthesia of the Arnold nerve.

7. Dissection of the anterolateral wall of the thorax-pectoralis major, pectoralis minor, serratus anterior, subclavius, intercostals. Topography of the intercostal space. Anatomic coordination points for the intercostal puncture. Mammary region: structure of the mammary gland; blood supply, nerve supply, lymphatic drainage of the mammary gland.
8. Dissection of the axilla. Walls of the axilla; main vascular-nervous bundle, secondary vascular-nervous bundles. Axillary artery. Dissection of the axilla. Formation of the brachial plexus. Dissection of the branches of the brachial plexus, axillary lymph nodes.
9. Dissection of the anterior region of the arm-muscles, vessels, nerves. Surface anatomy.
10. Dissection of the antero-lateral region of the forearm-muscles, vessels, nerves. Carpal tunnel: delimitation and content. Superficial veins of the upper limb. Surface anatomy.
11. Dissection of the palm. Topographic regions of the palm. Thenar muscles, hypothenar muscles, muscles of midpalmar region. Synovial sheaths of the carpal tendons. Vessels, nerves. Surface anatomy.
12. Dissection of the scapular region- muscles, vessels, nerves. Surface anatomy.
13. Dissection of the posterior region of the arm-muscles, vessels, nerves. Triangular and quadrangular spaces bounded by the humerus, long heads of the triceps brachii, teres major and teres minor (triangular space, triangular interval, quadrangular space): delimitation, content. Surface anatomy.
14. Dissection of the posterior region of the forearm- muscles, vessels, nerves. Surface anatomy.
15. Topographic sections at the level of the upper limb.

<p>16. EXAMINATION-upper limb</p> <p>17. Dissection of the anterolateral wall of the abdomen-obliquus externus abdominis, obliquus internus abdominis, transversus abdominis, rectus abdominis; rectus sheath; vessels and nerves. Surface anatomy of the abdominal wall: muscular relief, grooves, projection of the inferior epigastric vessels.</p> <p>18. Dissection of the inguinal canal- walls and rings of the inguinal canal; content of the inguinal canal in male and female; projection of the weak points of the abdominal wall. Lacuna musculorum, lacuna vasorum-limits and content. Formation and the branches of the lumbar plexus.</p> <p>19. Dissection of the anteromedial region of the thigh. Femoral triangle- limits, content. Great saphenous vein, femoral vein, femoral artery. Superficial and deep inguinal lymph nodes. Femoral sheath. Adductor canal- limits, content.</p> <p>20. Dissection of the anterolateral region of the leg- muscles, vessels, nerves. Surface anatomy.</p> <p>21. Dissection of the gluteal region- muscles, vessels, nerves. Surface anatomy.</p> <p>22. Suprapiriform and infrapiriform spaces-delimitation, content. Formation of the sacral plexus.</p> <p>23. Dissection of the posterior region of the thigh- muscles, vessels, sciatic nerve.</p> <p>24. Dissection of the popliteal region – topography and content. Surface anatomy.</p> <p>25. Dissection of the posterior region of the leg- muscles, vessels, nerves. Small  a. saphenous vein. Calcaneal canal: delimitation, content.</p> <p>26. Dissection of the plantar region- muscles, vessels, nerves.</p> <p>27. Topographic sections at the level of the lower limb.</p> <p>28. EXAMINATION-review</p>		
<p><b>8.3.2. Lectures 1<sup>st</sup> year, 2<sup>nd</sup> Semester</b></p>	<p><b>Metode de predare</b></p>	<p><b>Observații</b></p>
<p>1. Neuro- and viscerocranium.</p> <p>2. Walls of the orbit, osseous walls of the nasal cavity, infratemporal fossa, pterigopalatine fossa. Mandible.</p> <p>3. Craniofacial muscles and facial nerve. Masticatory muscles and facial artery.</p> <p>4. Trigeminal nerve (ophthalmic and maxillary</p>	<p>The main purposes of teaching methods are  - recognition, but also structural and developmental description of the studied anatomical structures  - understanding and development of skills in clinical using of acquired anatomical knowledge</p>	

<p>nerves), ciliary ganglion, pterigopalatine ganglion (afferents and branches)</p> <ol style="list-style-type: none"> <li>5. Mandibular nerve, otic ganglion (afferents and branches), submandibular ganglion (afferents and branches).</li> <li>6. Posterior auricular artery, occipital artery, inferior thyroid artery and ascending pharyngeal artery (course and branches)</li> <li>7. Sternocleidomastoid, scalenes, accessory nerve.</li> <li>8. Glossopharyngeal nerve-course and branches. Vagus nerves at the level of the neck. Superior and inferior laryngeal nerves.</li> <li>9. Hypoglossal nerve-course and branches</li> <li>10. Cervical sympathetic trunk-structure, branches</li> <li>11. Subclavian artery-course, branches. Arterial anastomoses around the scapula.</li> <li>12. Cervical plexus-formation, superficial and deep branches. Ansa cervicalis (formation, distribution).</li> <li>13. Infrahyoid and suprahyoid muscles. Cervical fasciae.</li> <li>14. Veins of the head- internal, external and anterior jugular veins (formation, tributaries).</li> <li>15. Thyroid gland, parathyroid glands (structure, relations, blood supply).</li> <li>16. Lymph vessels and nodes of the head and of the neck.</li> <li>17. Oral cavity and salivary glands.</li> <li>18. EXAMINATION-the head and the neck</li> <li>19. Walls of the thoracic cavity. Trachea and bronchi</li> <li>20. Lungs (description, structure, segmentation). Blood vessels of the lungs (pulmonary and bronchial vessels)</li> <li>21. Pleura- pleural recesses. Projection of the lung fissures.</li> <li>22. Heart- external aspect (surfaces, margins, base, apex)</li> <li>23. Internal aspect of the heart (atria, ventricles, interatrial and interventricular septa, orifices, valvular apparatus).</li> <li>24. Blood supply of the heart (coronary arteries, coronary sinus). Nerve supply of the heart (cardiac plexus)</li> <li>25. Serous and fibrous pericardium. Sinuses of the serous pericardium. Blood supply and nerve supply of the pericardium.</li> <li>26. Mediastinum and its subdivision. Contents of the superior mediastinum:</li> </ol>	<p>- development of logical , causal thinking in medical studying...  The teaching methods for anatomical study: -dissections of human bodies, presentations on anatomical dissected parts, anatomical preparations, bones, sections; -microscopic examinations of histological sections-human embryos and fetuses- at practical sessions of embryology; radiological anatomy with examination of radiographies; - documentation in our discipline museum, study on cross-sections of human body, study on normal x-rays, CT and MRI</p>
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brachiocephalic veins, superior vena cava, aortic arch and its branches, thymus and the nervous structure in the mediastinum. Anterior and middle mediastinum. Posterior mediastinum (thoracic esophagus structure, blood supply, nerve supply).		
27. Thoracic aorta and its branches. Thoracic duct. Mediastinal lymph nodes. Thoracic sympathetic trunk.		
28. Review-thorax and its content		

**Bibliografie**

Gray's Anatomy – pentru studenți, Coordonator F.Filipoiu, Editura Elsevier – Prior, București

Atlas de anatomie – nomenclatura latină – Gilroy, Coordonator F.Filipoiu, Editura Prior, București

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## 9. Coroborarea conținuturilor disciplinei cu așteptările reprezentanților comunității epistemice, asociațiilor profesionale și angajatori reprezentativi din domeniul aferent programului

Anatomy professional training of the first- and second-year students aims:

- recognition and identification of anatomical structures related to the need of effective communication with the patient and academic environment
- preparing the future physician/doctor for a proper and good professional communication with the future employer

## 10.Evaluarea

Tip de activitate	10.1. Criterii de evaluare	10.2. Metode de evaluare	10.3. Pondere din nota finală
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	Attendance at practical sessions/labs, at courses/lectures, at dissections on human bodies, presentations on anatomical dissected parts, on preparations, bones, sections and health issues, control tests.	Sem I The student receives a 30 MCQ test divided in 3 groups: I-lecture, II-upper limb, III-lower limb and abdominal wall. Each group must be passed with a minimum of 5 points each. Sem II The student receives a 30 MCQ test divided in 3 groups:I-lecture,II-anatomy of the head and neck,III-anatomy of the thoracic organs .Each group must be passed with a minimum of 5 points each	
<b>10.1. Curs</b>		MCQ Examination	
<b>10.2. Seminar / laborator</b>		PRACTICAL EXAMINATION ORAL EXAMINATION	
<b>Standard minim de performanță</b>			
Pass mark is 5. Failure of the practical ,the student being marked with grade 4			

**Data completării:**

**11.09.2017**

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**Professor  
FLORIN FILIPOIU PhD**

**Data avizării în Consiliul**

**Departamentului:**

**12.09.2017**

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**Semnătura directorului de departament**