TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**ANATOMY AND EMBRYOLOGY (I)**				
Didactic position, name and surname for the Coordinator of the Discipline	**Tudorache Ioan Sorin, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Course	**Tudorache Ioan Sorin, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Vasilică Cristescu, M.D., Ph. D., Assoc. Professor** **Hârşovescu Tudor, M.D., Ph. D., Lecturer** **Dincă Gabi-Valeriu, M.D., Ph. D., Lecturer** **Tudorache Ioan Sorin, M.D., Ph.D., Lecturer** **Köver Zoltan Janos, M.D., Ph.D., Univ. Assistant** **Coroescu Mirela, M.D., Ph.D., Univ. Assistant**				
Discipline Code	**MLE.2.3.1**	Formative category of the discipline		**FS**	
Year of Study	**II**	Semester	**3**	Type of the final evaluation (**E, V**)	**E3**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)		**M**		No. of credits	**9**

No. of Hours per week	**8**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**6**
Total of hours in the curriculum	**112**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**84**
		Total hours per semester	**225**	Total hours of individual study	**113**

Distribution of time pool per week	**Hours**
1. Study of the course material	7
2. Study according with the course support, manuals	29

3. Study of the minimal bibliography	17
4. Additional documentation in the library	17
5. Specific activity for the seminary or laboratory	17
6. Homeworks, translations, etc.	0
7. Preparing for different written exams	0
8. Preparing for oral examinations	0
9. Preparing for the final examination	11
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	13
13. Tutoring	2
14. Examinations	0
15. Other activities:	0

Course name	**ANATOMY OF THE ABDOMEN AND PELVIS. SPECIAL EMBRYOLOGY**
Specific professional competencies	• Recognition and identification: - topographical regions of the abdomen and pelvis. - by palpation, bone markers. - palpable arteries, pulse, ligation marks. - the approach of the superficial venous system. - groups of palpable superficial lymph nodes. - viscera and abdomino-pelvin vascular formations by radiological and imaging methods. - peritoneal cavity spaces • Exploration by classical clinical methods: palpation, percussion, auscultation of abdomino-pelvin viscera. • Preliminary conditions for the acquisition of specific professional competences: fundamental notions of anatomy and physiologyacquired in the discipline Anatomy and Embryology, respectively Physiology within the first year of studies. as well as esc the notionsof histology that areacquiredin the Histologydiscipline in the first yearlof studies.
Transversal competencies	• Accommodating the student with medical terminology. Accommodation to the specifics of medical activity through oral presentations both during the semester and in the exam. Stimulating teamwork through student participation in dissection, active participation in the Student Circle of Anatomy, elaboration of scientific papers. "Anatomy is the science of the living form" (Francisc Rainer) – the implementation of notions of functional anatomy and the establishment of anatomical-clinical correlations.
General objectives of the discipline	• Presentation of the notions of special embryology and the anatomy of abdomino-pelvine viscera as well as the walls of the abdomino-pelvine cavity.
Specific objectives of the discipline	• Linking notions of anatomy acquired through courses, practical works, consultation of bibliography and iconography with dissection study of corpses and modern presentations. Presentation of notions of living anatomy, palpations, discoveries, clinical anatomy and modern imaging.

Course Syllabus		Hours
1.	The anatomic and clinic division of the abdominal wall. Stratigraphy of the abdominal wall. Peritoneum – structure, functions. The topographical map of the abdominal cavity. The omental space.	2
2.	Development of the serous. Formation of the diaphragm. Mesentery, ligaments, coalescence fascia.	2
3.	Primitive intestine, derived. Proenteron. Mezenteron.	2
4.	Metenteron. Malformations.	2
5.	Development of the liver, the bile, pancreas. Malformations. Development of the port system. Porto-cave anastomoses.	2
6.	General structure of the digestive tract.	2
7.	Development of the urinary apparatus. Malformations.	2
8.	Development of the male genital apparatus – malformations.	2
9.	Development of the female genital apparatus – malformations.	2
10.	Space retroperitoneal. Abdominal aorta, lower cava vein, joint of iliac vessels, external, internal.	2
11.	Abdomino-pelvin lymphatics.	2
12.	Celiac region. Abdomino-pelvin vegetative plexuses.	2
13.	Topographic anatomy. Abdomino-pelvin viscera projections. Painful points.	2
14.	Perineal topographic regions – practical applications. Clinical anatomy and imaging of abdomino-pelvin viscera.	2

Laboratory Syllabus		Hours
1.	Abdominal wall – structure. Inguinal canal. Weak areas of the abdominal wall. Anatomy on the living. Clinical applications	3
2.	Peritoneum	3
3.	Abdominal esophagus. Stomach	3
4.	Omental stock exchange. The access to the omental space. The celiac trunk.Celiac plexus.	3
5.	Duodenum	3
6.	Pancreas	3
7.	The liver, intrahepatic bile ducts.	3
8.	Extrahepatic bile ducts. Spleen. Supramezocolic space. Clinical applications. Radiological anatomy.	3
9.	Colloquium #1	3
10.	Mesenteric intestine. The Mesentery	3
11.	Cecum and vermiform appendix. Clinical applications	3
12.	Colon. Mesocolon. Mesosigmoid.	3
13.	Rectum. Inframezocolic space: Sectional anatomy. Anatomy on the living. Clinical applications. Radiological anatomy	3
14.	Kidneys	3
15.	Adrenal glands. Ureter	3
16.	Urinary bladder. Urethra.	3
17.	Retroperitoneal space. Sectional anatomy. Anatomy on the living. Clinical applications. Radiological anatomy.	3
18.	Colloquium #2	3
19.	The ovary. The fallopian tube.	3
20.	Uterus	3

Laboratory Syllabus	Hours
21. Vagina. The obstetric alb. Pelvimetry.	3
22. The scrotum. Testicle. Sperm pathways. The spermatic funicular.	3
23. Prostate and seminal vesicles. The mechanism of erection.	3
24. Pelvic-subperitoneal space. Pelvic diaphragm. The perineum.	3
25. Pelvic space. Sectional anatomy. Anatomy on the living. Clinical applications. Imaging anatomy.	3
26. Colloquium #3	3
27. Embryology #1	3
28. Embryology #2	3

Minimal References:
1. Official course
2. Tubul digestiv abdominal si glandele anexe. Splina - sub redactia Prof. V. Ranga – litografia IMF Bucuresti, Editura Cerma
3. Tratat de patologie chirurgicala Vol. VIII.I – sub redactia Prof. E. Proca, Editura Medicala 1984, pag 15-70.
4. Anatomia omului, Aparatul genital – sub redactia Prof. A. Ispas, Editura Universitara Carol Davila Bucuresti 2005
5. Anatomia functionala a tubului digestiv subdiafragmatic - sub redactia Prof. Cezar Th. Niculescu, Editura Tehnoplast Company Bucuresti 2001
6. Anatomia aparatului genital - sub redactia Prof. Cezar Th. Niculescu, Editura Infomedica Bucuresti 1999
7. Anatomia omului Vol.II Splanhnologia - Victor Papilian 2005
8. Anatomia dezvoltarii omului – Armand Andronescu, Editura Didactica 1992
9. Anatomia lui Gray pentru studenţi – A. Wayne Vogl, Adam W. M. Mitchell, Richard L. Drake, Elsevier, 2016
10. Anatomie clinică – fundamente şi aplicaţii – Keith L. Moore, Arthur F. Dalley, Anne M.R. Agur, Editura Calisto 2012
11. Langman's medical embryology - 2016

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- In carrying out the analytical programmes for both the course and for practical work, we took into account the ways of studying anatomy in the higher education institutions of the country and in the European Union. In order to harmonise the preclinical discipline sheets, we organized working sessions at the Department level, identifying the optimal ways of linking the educational process. Following consultations with hospital managers and private administrators of firms providing clinical and paraclinical medical services, we have given greater importance to the practical, clinical, radiological and imaging anatomy for easier integration of graduates into the labour market.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• Laptop, video projector. Modern PowerPoint presentation of the course. • Interactive course.

Disemination of the information	
	• Anatomical-clinical correlations. • Answers to students' questions.
Laboratory	• Laptop, video projector. • Modern presentation using magnetic boards, flipchart, Power Point, virtual dissection software. • Classical study by dissection, use of specific teaching materials: skeleton, bone collection, anatomical preparations, sections. Interactive practical work. • Getting radiological anatomy and imaging, clinical anatomy. • Practical embryology work using both histological preparations and digital presentation. Answers to students' questions.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:

Minimum standard of performance - minimum scale of activities to be performed by the student in practical work

- the presence of the student at a minimum of 70 % practical work and the restoration of all absences or (including absences from evaluations during the semester)- the carrying out of references for the understanding of the basic stakes of the practical work in question. - identification of the basic anatomical formations on the teaching materials used (skeleton, bone collection, corpses, preparations of anatomic structures, iconography, radiological iconography and imaging) - interactive participation in the practical work; answers to the questions of the teacher who has practical work, discussions.

Minimum scale of activities to be performed by the student in the practical exam in order to be admitted to the exam (final verification): obtaining the average 5 on the pactical exam of anatomy

- The practical examination of anatomy consists in identifying a minimum of 9 out of 18 anatomical formations on teaching materials (anatomical preparations, sections of encephal, iconography, results radiological and imaging examinations).

Specific conditions for carrying out the theoretical and practical activities of the discipline:

- For the acquisition by the student of the minimum level of competences specific to the discipline we consider it necessary to participate interactively in the practical work, the ovaries of the practical examination of anatomy and solving the subjects in the final examination.

Consideration points for computing the final score:	Share of the final score (in %) (Total = 100%)
- Responses to the final exam	60 %
- Responses to the laboratory examination	10 %
- Periodic checks with written exams	20 %
- Continuous testing throught the semester	10 %
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-

Description of the actual methods of examination – E

- The exam consists of the oral presentation of the 3 subjects extracted by the student from the 3 categories (1 category course subjects and 2 categories subjects practical papers).
- All subjects are brought to the attention of students at the beginning of the semester.

- The exam is held in groups, time is given to students and is transparent. At examination participate a minimum of 3 students, the head of discipline, the head of the practical works and the university assistant who guided the group in the respective semestre. - Medicine has always been a profession that requires communication with patients and communication between doctors, we consider that oral examination allows us to evaluate basic anatomical knowledge and induces the student the need for establishing anatomical-clinical correlations.	
Minimal requirements for grade 5	**Requirements for grade 10**
• The presence of the student at least 70% practical work with the restoration of all absences. • Supporting atleast3 colloquiums and obtaining at least a grade of5 to 2 out of 3 colloquial (the colloquial are also restored). • Making the reports related to the practical work and the knowledge of the basics of the practical work. • Obtaining the 5th average in the practical examinations of anatomy and embryology. • Minimal responses (note 5) to subjects extracted from the 3 categories of subjects.	• Average over 9 in the 3 colloquiums during the semester. • Average over 9 in the practical examinations of anatomy and embryology. • Average over 9 on the 3 exam subjects extracted.

Date of completion

25.09.2018

Discipline Coordinator,

Tudorache Ioan Sorin, M.D., Ph.D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Tudorache Ioan Sorin, M.D., Ph.D., Lecturer

Laboratory Coordinator,

Vasilică Cristescu, M.D., Ph. D., Assoc. Professor
Hârșovescu Tudor, M.D., Ph. D., Lecturer
Dincă Gabi-Valeriu, M.D., Ph. D., Lecturer
Tudorache Ioan Sorin, M.D., Ph.D., Lecturer
Köver Zoltan Janos, M.D., Ph.D., Univ. Assistant
Coroescu Mirela, M.D., Ph.D., Univ. Assistant

Department approval date

30.09.2018

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**PHYSIOLOGY (I)**				
Didactic position, name and surname for the Coordinator of the Discipline	**Ciurea Jean, M.D., Ph. D., Assoc. Professor**				
Didactic position, name and surname for the Coordinator of the Course	**Ciurea Jean, M.D., Ph. D., Assoc. Professor**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Ciurea Jean, M.D., Ph. D., Assoc. Professor** **Cojocaru Manole, M.D., Ph. D., Assoc. Professor** **Nemeș Roxana, M.D., Ph. D., Assoc. Professor** **Petrescu Daniel, M.D., Ph. D. Student, Univ. Assistant**				
Discipline Code	**MLE.2.3.2**	Formative category of the discipline		**FS**	
Year of Study	**II**	Semester	**3**	Type of the final evaluation (**E, V**)	**E3**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)		**M**	No. of credits	**6**	

No. of Hours per week	**5**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**3**
Total of hours in the curriculum	**70**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**42**
		Total hours per semester	**150**	Total hours of individual study	**80**

Distribution of time pool per week	**Hours**
1. Study of the course material	5
2. Study according with the course support, manuals	5

3. Study of the minimal bibliography	5
4. Additional documentation in the library	5
5. Specific activity for the seminary or laboratory	5
6. Homeworks, translations, etc.	10
7. Preparing for different written exams	5
8. Preparing for oral examinations	10
9. Preparing for the final examination	5
10. Consultations	5
11. In the field documentation	5
12. Documentation from web sources, portals, wiki websites	5
13. Tutoring	5
14. Examinations	5
15. Other activities:	0

Course name	**PHYSIOLOGY (I)**
Specific professional competencies	• Starting from the recapitulation of the general notions of anatomy necessary to understand the way in which the function of an organ / apparatus / system is carried out, a topic is approached which by specific, specialized terms and notions is useful both for the study of disciplines from other academic years and for subsequent medical practice. • In the presentation of the way one organ works, the constant aim is to emphasize that the normal functioning of the organism is that of a "unitary whole", in which the mode of activity of one organ influences the performance of the others; • Facilitates the understanding of the scientific methodology for measuring biological functions through laboratory analyzes and paraclinical investigations; • In relation to the normal biological values allows the appreciation / evaluation of the degree of general disorder of the organism functions;
Transversal competencies	• The discipline "lays" the foundation for the subsequent understanding of: the etiology and general pathogenesis of diseases, their evolution, the way of adaptation and reactivity of the body to risk factors, favors and determinants of various diseases. • To achieve this goal, the discipline adopted the latest learning techniques: the interactive nature of classes and practical works, modern methods of acquiring knowledge, such as: grid tests, learning algorithms, schemes and designed figures, etc. • Professionalism is based on a permanent, up-to-date information but also on the knowledge of the basic elements and notions, which will serve to understand the notions taught in the disciplines of the following years of study.
General objectives of the discipline	• Understanding and mastering by the student the functioning at optimal levels of an organ, conditionality that generates the normo-functionality of the whole organism. After promoting the discipline, the student has the minimum knowledge necessary to acquire the general etiopathogenic mechanisms taught by diseases, which will be the subject of study in clinical disciplines.

	• At the end of the study period of the discipline the student knows the methodology through which the functionality of an organ and of the whole organism can be evaluated; Specifically, he knows the main laboratory / paraclinical investigations and their normal values, useful data in assessing the state of health or disease, as well as recovery from an applied therapeutic guide.

Specific objectives of the discipline	• Training students to become competitive and through knowledge of physiology, as a basic foundation of knowledge in the medical field;
	• The curriculum of the discipline to offer a permanent topical training, in dynamics. In this sense, 2 sessions of 2 hours / semester each, among the course ones, have topics established by mutual agreement with the students; as a rule, they are the penultimate and last of the semester in progress;
	• The discipline will continue to cooperate with other departments regarding the topics of the courses, in order to eliminate the parallelism of the topic and to develop at the level of
	• Department enthusiasm to "work in a team";
	• The discipline to be recognized for the quality and originality of the training and teaching programs, in order to motivate and attract the student.
	• Discipline to allow the future doctor, based on the knowledge gained, to react in a timely manner, in case of illness, by:
	  • Juxtaposing the state of suffering of the organism and making the optimal decision in carrying out a triage of the severity of the patients, prioritizing the emergencies;
	  • The act is of major importance in promptly providing, by the doctor, the medical service that is required to be performed and cannot be evaluated to juxta-importance, except by knowing how the body functions in full health.

Course Syllabus	**Hours**
Course No. 1. Respiratory physiology. (I) Getting functional anatomy of pulmon, pleura and mediastinum; The role of the nasal cavity in conferring inspired air quality, "air conditioning"; The role of other airways in ventilation; Pulmonary ventilation mechanics; Pulmonary infusion. V/Q ratio. Structure of the alveolo-capillary diffusion membrane. Hematosis. Recapitulation of the forms of transport of gases by the blood.	2
Course No. 2. Respiratory physiology. (II) Neuro-femoral eglation of breathing. Central nervous structures involved in regulating breathing. The differences and events of the "respiratory center". Respiratory reflexes. The role of peripheral and central chemoreceptors: influence on ventilation; Hyper- and hypoventilation, as physiological and compensatory processes. Reflexes triggered under pathological conditions that affect the conduct of breathing.	2
Course No. 3. The olfactory analyzer. The phonation.	2
Course No. 4. Functional anatomy of the myocardium. Membrane potentials of adult and embryonic heart cells. The use of oxygen by the heart and metabolic pathways of energosynthesis. The properties of the heart. (Part I).	2
Course No. 5. The properties of the heart. (Part II): myocardial contractility. Mechanical model of myocardial contraction. The process of myocardial relaxation. Reserve mechanisms of myocardial contractility.	2
Course No. 6	2

Course Syllabus	Hours
The heart, like mechanical pump. Cardiac revolution: the phases of the cycle; the genesis of cardiac noises. Circulatory and organ flows	
Course No. 7. Heart, as "endocrine organ": natriumetic peptides and their role. The role of the vegetative nervous system in regulating the main functions of the heart. Hormonal regulation of the heart.	2
Course No. 8. The role of the vascular component of the cardio-vascular apparatus. Ways of flow and determinants in blood flow. Pulse pressure.	2
Course No. 9. Blood pressure. Mechanisms for regulating arterial pressure: rapid, intermediate-acting and control system by variation of fluid volumes/kidney role. Functional anatomy of microcirculation. capillary exchanges	2
Course No. 10. The physiology of the system of returning blood to the right heart. The role of intravascular and extravascular factors. Venous pressure. Physiology of the lymphatic circulatory system	2
Course No. 11. The role of the vegetative nervous system in regulating blood circulation through the vascular system. endocrine function of vascular endothelium. Hormonal-humoral regulation of blood flow through the vessels.	2
Course No. 12. The physiology of the oral cavity. Salivary secretion: physical constants, composition, roles. Adjustment of salivary secretion. Taste analyzer.	2
Course No. 13. Mastication; the descent reflex of the mandible. myotatic reflex of lifting the mandible. the state of occlusal rest. Nevoror snow. The dentition and its role.	2
Course No. 14. Swallowing: anatomical-functional structures involved, esophageal peristaltic, swallowing times. Nervous and hormonal control of swallowing. Visceral-peritoneal adiposity, as "endocrine organ". The main cytokines secreted, their mode of action, role developed.	2

Laboratory Syllabus			Hours
1.	**I. Respiratory investigation:** (2 practical work sessions)	**Practical work No. 1** Exploration of ventilation by spirometrymethod: a. Presentation of the spirometer and the conditions of determination of respiratory volumes. The main tests to investigate “performance" of thoraco-pulmonary structures (respi-rator flow and respiratory frequency) and implicit ventilation (pulmonary volumes and capacities). b. Dynamic exploration of pulmon, through: VEMS, VIMS, VEMS/VIMS ratio;	3
2.		**Practical work No. 2** a. Definition of "death" spaces (anatomical and functional); b. Tiffeneaux Index, pharmacological bronchomotor tests (indications and precautions). c. Dosage of oxygen and carbon dioxide in exhaled air and alveolar (Orsat apparatus). d. Alkaline reserve: definition, principle of determination, normal values, usefulness in medical practice.	3
3.	**II. EKG**	**Practical work No. 3** The genesis of myocardial electric currents. Defining waves, segments and range. Define the line isoelectric, sub-levelling and over-leveling	3

Laboratory Syllabus			Hours
4.	**paraclinical exploration test Heart** (4 meetings)	**Practical work No. 4** PQ segment and range, QRS complex A. Changes in the segment and the PQ range respectively: shortcuts (general notions of the WPW sindoma) and elongations/suppressions (Atrioventricular Blocks). B. Changes in the QRS complex in: left and right ventricular hypertrophies (without biventricular ones). C. Determination of intrinsic deflection and its importance. The Sokolov-Lyon index and its significance. D. Definition of branch blocks and summary presentation of their possible ethiopathogeny. Changes to the QRS complex in branch blocks: left, right. (not in hemiblocks). Specify morphological criteria ecg of major block and minor block. E. Practical work on ecg routes to learn the interpretation of an ecg, with answers to the questions from the previous session of practical works, plus: is there a change in the electrical axis of the heart with its identification? Is the process of depolarization of the ventricular myocardium modified and at what level? Calculation of the value of intrinsic deflection.	3
5.		**Practical work No. 5** ST-T segment and T-wave (myocardial repolarization phase) A. Summary explanations about myocardial irrigation; specification of the notions of hypoxia and regional anoxia of the myocardium. B. Ventricular myocardial repolarization phase. Recapitulation of the notions of ischemia and injury respectively. The significance of morphological deviations of the terminal phase complex (T wave + ST segment): subendocardial and epicardial ischemia(T-wave); subepicardial and subendocardial segmet. C. Description of morphological-pathogenic zones in acute myocardial infarction. A. Ischemia and primary T-wave changes; (insisting on its asymmetry under the conditions of a normal irrigated myocardium). B. Injury and significance of deviations from the isoelectric line of the ST segment; over- and sub-leveling. C. Necrosis and connection to the pathological Q wave. Definition of pathological Q-wave characteristics. B. Effort tests. C. Interpretation of ECG paths.	3
6.		**Practical work No. 6** The genesis of myocardial electric currents. Defining waves, segments and range. Define the line isoelectric, sub-levelling and over-leveling	3
7.	**III. Paraclinical diagnosis of normal vascular functions: arteries, veins, capillaries:**	**Practical work No. 7** Arterial system: A. Definition of arterial pressure and measurement mode. B. Exploring vascular reactivity: Cold pressor test and two-stroke posture test. The Allen test. C. Oscilometry: principle, utility in medical practice, normal oscillometric index.	3

Laboratory Syllabus			Hours
	(3 lessons)	D. Cutaneous thermometry: principle, utility in medical practice.	
8.		**Practical work No. 8** Exploration of the venous system: A. Definition of venous pressure and measurement mode. B. Test for the evaluation of the insufficiency of the valves of the deep venous system of the lower limbs: Trendelenburg-Troianov test. C. The sample of the three tourniquets and its usefulness in medical practice.	3
9.		**Practical work No. 9** Exploring capillaryfunctionality: a. General notions about capillaroscopy and the determination of capillary resistance. will be presented: Rumpel Leede test. b. Ultrasonic exploration of how blood flow is carried out in a given territory: Echo-Doppler arterial and venous. c. Echocardiography-general notions: technical, the main parameters obtained by investigation, utility in medical practice.	3
10.	**IV. Investigation of the digestive system:** (4 lessons)	**Practical work No. 10** Investigation of the secretory function of the stomach 1. Recapitulation of the main knowledge of the secretory function of the stomach. a. Summary notions on the main types of cells involved in gastric secretion (with emphasis on acid secretion); mechanisms involved in acidic gastric secretion (the role of MCP, vagus, histamine, gastrine). b. Normal parameters of gastric secretion and acidity (basal secretory volume, maximum stimulated secretory volume – Maximum Kay test, basal acid flow, maximum acid flow, nocturnal acid secretion). 2. The main tests to stimulate gastric acid secretion with insulin (Holander), with histamine pentagastrin (histologist), of the medicinal blocking of the vagus. The usefulness of these tests in everyday medical practice. 3. Definition of notions and examples of pathological circumstances in which occur: anacidity, hypoacidity and hyperacidity. 4. Summary notions of the determinations of enzymes contained in gastric juice and the usefulness of these dosages (without techniques). 5. Utility for medical practice of determining gastric juice cytology. 6. General ities concerning the research of acute haemorrhages in focal materials. Listing techniques (Weber, Adler, Castle-Meyer), significance of test positives, false positive results. The rigors of diet in such determinations.	3
11.		**Practical work No. 11** Exploring the function of digestion and absorption of the intestine A. Exploring intestinal absorption: a. For proteins: generalities regarding principle and usefulness: dosing of fecal nitrogen and carrying out the protein absorption test marked with methionine-S^{35}. b. For carbohydrates: generalities regarding the principle and usefulness of the D-xylose test and the disaccharide absorption test. Recap on fasting blood glucose dosing.	3

Laboratory Syllabus			Hours
		c. Exploring intestinal lipid absorption. B. Active iron absorption assessment test (Fe^{59}) : sideremia – normal values. C. Vitamin B_{12} absorption test (Schilling test). D. Examination of faeces – basic test of digestive exploration, overall. a. macroscopic examination; b. microscopic examination; c. the main chemical parameters to be investigated in faeces (enumeration, clinical significance); d. coproparasitological examination and coproculture (generalities, as it is the competence of other disciplines: microbiology, parasitology, infectious diseases). E. General regarding the usefulness of exploring various segments of the digestive tract through endoscopy.	
12.		**Practical work No. 12** Investigation of the morpho-functional state of the exocrine pancreas; 1. Exocrine pancreas: Recapitulation of the main knowledge accumulated in previous years of study, concerning: a. Functional anatomy of the pancreas, with emphasis on the functions of exocrine pancreas. b. Exploring the secretion of the exocrine pancreas. A. Direct methods of exploration: duodeno-pan-creatic tubing (normal parameters of spontaneous and stimulated secretion: secretory flow, concentration in hydrocarbonates, global enzyme activity). General on techniques for stimulating the exocrine pancreas. B. Dosage of pancreatic enzymes in the blood and urine (with emphasis on lipazemia, amylasemia and amylazuria). Normal values, clinical usefulness of determinations. C. Indirect methods of exploring the secretion of the exocrine pancreas. Chemical dosing of steatorea, starch and fat tolerance test, fatty substance test marked with I^{131} (triolein and oleic acid test). The usefulness of this test and the dosing of steatorea in exploring the development of the process of intestinal lipid absorption. 2.Scintigrams, as a means of exploring the appendix glands of the digestive tract: hepatic and pancreatic scintigram; General notions regarding other indications of performance and usefulness of scintigraphy, in diseases of other organs.	3
13.		**Practical work No. 13** Laboratory exploration of excretion-biliary function of the liver 1. Review on biligenesis; forms of circulating bilirubin, normal values; 2. Duodenal tube: enumeration methods; presentation of the Meltzer-Lyon method; 3. Bile examination: Macroscopic, microscopic (for bile sediment); 4. Definition of jaundice and its classification; general notions on the usefulness of total, indirect and direct bilirubinemia in diagnosing various forms of jaundice.	3
14.	**Practical work No. 14**		3

Laboratory Syllabus		Hours
	A. The main tests of hepatic cytolysis. B. Restoration of practical work	

Minimal References:
1. Guyton. Tratat de fiziologie a omului. Autor: Guyton & Hall ISBN: 978-973-87261-4-7 Editura: Medicala CALLISTO Anul publicarii: 2007 Ediția: 11 Pagini: 1152 pag.
2. Stevanovic, Nikola. (2019). Guyton and Hall Textbook of Medical Physiology - 12th-Ed.
3. Fiziologie Medicala - Walter Boron, Emile Boulpaep, Leon Zagrean, 2017 Editura: Hipocrate Editia: a III-a ISBN: 9789738837232
4. Official course

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
• The provision of medical services by the future doctor requires the mandatory knowledge of knowledge on the normal functioning of the body, with the inter-conditionality of the activity of devices and systems. The appreciation of the return to the status of a biological normal functioning of a patient, implies the relation to the previous normal. Even if only from this, the acquisition of the notions of physiology is imposed as a quasi-permanent necessity, in order to have comparison criteria regarding the Normal. Achieving this biological state in the dynamics of a disease, identified by the Functional Normal allows to obtain a double goal: - proving a thorough knowledge of the fundamentals of medical practice; - to avoid a hasty evaluation of the evolution as "good", but which can become a malpractice.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• Interactive learning; multimedia projection of course support
Laboratory	• Interactive discussions • Interpretation of analysisbulletins

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
• to know the basic concepts justifying: the usefulness in medical practice of a laboratory or paraclinical investigation carried out on a patient; • be aware of the principle of determination, normal values and the generic name of deviations less and plusrespectively; • it is not permissible to support the L.P. colloquium without recovering the topic taught at the laboratory meetings, at which the student was absent; recovery is mandatory, regardless of whether the absence is reasoned or not; • be able to interpret the result from a laboratory/paraclinical analysis bulletin in general;

Consideration points for computing the final score:	Share of the final score (in %) (Total = 100%)
- Responses to the final exam	60 %
- Responses to the laboratory examination	15 %
- Periodic checks with written exams	10 %
- Continuous testing throught the semester	10 %

- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	5 %

Description of the actual methods of examination – E

- Descriptive test, 3 hours, with 2 subjects and a quiz test, 45 questions.

Minimal requirements for grade 5	Requirements for grade 10
• Minimum 50% correct answers	• Minimum 90% correct answers

Date of completion

25.09.2018

Discipline Coordinator,

Ciurea Jean, M.D., Ph. D., Assoc. Professor

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Ciurea Jean, M.D., Ph. D., Assoc. Professor

Laboratory Coordinator,

Ciurea Jean, M.D., Ph. D., Assoc. Professor
Cojocaru Manole, M.D., Ph.D., Assoc. Professor
Nemeș Roxana, M.D., Ph.D., Assoc. Professor
Petrescu Daniel, M.D., Ph. D. Student

Department approval date

30.09.2018

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**HISTOLOGY (I)**				
Didactic position, name and surname for the Coordinator of the Discipline	**Albulescu Radu, M.D., Ph. D., Assoc. Professor**				
Didactic position, name and surname for the Coordinator of the Course	**Albulescu Radu, M.D., Ph. D., Assoc. Professor**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Urichianu Adrian Ion, Ph.D., Assoc. Professor** **Anghelescu Iuliana, M.D., Ph. D., Univ. Assist.**				
Discipline Code	**MLE.2.3.3**	Formative category of the discipline		**FS**	
Year of Study	**II**	Semester	**3**	Type of the final evaluation (**E, V**)	**E3**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)		**M**		No. of credits	**4**

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**100**	Total hours of individual study	**44**

Distribution of time pool per week	**Hours**
1. Study of the course material	4
2. Study according with the course support, manuals	4

3. Study of the minimal bibliography	4
4. Additional documentation in the library	4
5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	4
7. Preparing for different written exams	2
8. Preparing for oral examinations	4
9. Preparing for the final examination	2
10. Consultations	2
11. In the field documentation	4
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	4
14. Examinations	2
15. Other activities:	0

Course name	**HISTOLOGY**
Specific professional competencies	• Knowledge of histological examination principles and methods. • Knowledge of the general architecture of the fundamental classes of tissues (epithelial, connective, muscular, nervous). • Knowledge of the main subclasses of tissues, in particular morphological, functional characteristics and the relationships between the various cellular components and elements of the extracellular matrix. • Differential diagnosis of tissue/organ by examination of histological preparations.
Transversal competencies	• Teamwork skills, oral and written communication skills, use of information and communication technology, professional ethics, etc.
General objectives of the discipline	• Description and understanding of the architecture of the human body llevel of component tissues. • Knowledge of interdependencies between the various histological components of the human body.
Specific objectives of the discipline	• The acquisition of techniques for the recognition of different tissues and organs. • Learning the methods used to differentiate them from similarstructures. • The acquisition of methods used in the differentiation of normal structures of structures/tissues, pathological organs. • establishing structure-function inter-relationships.

Course Syllabus		**Hours**
1.	Introduction tohistology	2
2.	Epithelial tissue – part 1	2
3.	Epithelial tissue – part 2	2
4.	Connective tissue – part 1	2
5.	Connective tissue – part 2	2
6.	Ultrastructure of epithelial and connective tissues	2
7.	Cartilaginous tissue	2
8.	Bone tissue	2

Course Syllabus	Hours
9. Verification (part-time examination)	2
10. Blood	2
11. Hematopoietic structures	2
12. Muscle tissue	2
13. Nervous tissue	2
14. Recap Sem I	2

Laboratory Syllabus	Hours
1. Methods of making histological preparations	2
2. Methods and instruments used in the examination of histological preparations	2
3. Epithelial tissue – 1	2
4. Epithelial tissue – 2	2
5. Connective tissue – 1	2
6. Connective tissue – 2	2
7. Ultrastructure of the epithelial and connective tissue	2
8. Cartilaginous tissue	2
9. Bone tissue	2
10. Blood	2
11. Hematopoiesis	2
12. Muscle tissue	2
13. Nervous tissue	2
14. Practical examination	2

Minimal References:

1. Suport de curs predat
2. Atlas Histologie generală. Crețoiu Dragoș, Sanda Maria Crețoiu. Editura Universitară Carol Davila, 2017
3. Borda A. şi colab.: Histologie Ţesuturile, Editura University Press, 2010
4. Mescher AL. Junqueira Histologie. Tratat și Atlas., Ed. Medicala Callisto, 2017,
5. Molecular Biology of the Cell – 6th Edition – Bruce Alberts, Garland Science – Taylor and Francis Group, 2014
6. Histology: A Text and Atlas, with correlated cell and molecular biology - Michael Ross and Wojcech Pawlina, Ed. Lippincott Williams & Wilkins, 2015
7. Junqueira's Basic Histology, 14ed, Text and Atlas, Anthony L. Mescher, McGraw-Hill Education, 2016
8. Oral Anatomy, Histology and Embryology, 5th Edition - Barry K.B Berkovitz, G. R. Holland & Bernard J. Moxham, Elsevier Science Publishers, 2017
9. Histology and Cell Biology: Examination and Board Review – Douglas F. Paulsen – McGraw-Hill, 2010

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:

- Acquiring the basic notions of cytology and histology of tissues and organs as a basis for further understanding of their physiology and pathology. Learning notions related to histological technique and microscopic study of tissues and organs. Acquiring the ability to recognize a tissue

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
or organ and a histological coloration, to perform a differential diagnosis between different tissues and organs.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• Exposure using the projector • Interactive discussions with students
Laboratory	• Exposure, practical activity using specific materials (biological samples, reagents, fixed histological preparations) and specific examination techniques (optical microscopy) as well as access to special methods (cell and tissue cultures) • Individual or group work of students according to the work of practice

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
• Theoretical knowledge of tissue architecture (epithelial, connective, muscular, nervous), with microscopic and electrono-microscopic ultrastructural aspects • Knowledge of histological organization and functions of the main tissue structures (e.g. skin, cardiovascular system, digestive, respiratory, etc.). • Practical skills for making, examining and describing observations on specific preparations.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	40 %
- Responses to the laboratory examination	20 %
- Periodic checks with written exams	20 %
- Continuous testing throught the semester	10 %
- Projects / Translations / Posters / Essays, etc.	10 %
- Other activities:	-

Description of the actual methods of examination – E

- Written test with 5 descriptive subjects and a 10-questions quiz.

Minimal requirements for grade 5	**Requirements for grade 10**
• Minimum 60% correct exam + colloquium answers	• Minimum 90% correct answers to CLP • Preparation and support of a theme/reference paper, etc. • Minimum 95% cumulative correct answers to exam+ control works + continuous testing

Date of completion

25.09.2018

Discipline Coordinator,

Head of the Department,

Urichianu Adrian Ion, Ph.D., Assoc. Professor	Nemeș Roxana, Assoc. Professor, M.D., Ph. D.
Course Coordinator,	**Laboratory Coordinator**,
Urichianu Adrian Ion, Ph.D., Assoc. Professor	Urichianu Adrian Ion, Ph.D., Assoc. Professor

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**BACTERIOLOGY (I)**				
Didactic position, name and surname for the Coordinator of the Discipline	**Mitache Magdalena, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Course	**Mitache Magdalena, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Mitache Magdalena, M.D., Ph.D., Lecturer** **Epuran Silviu, M.D., Ph. D. Student, Univ. Assistant**				
Discipline Code	**MLE.2.3.4**	Formative category of the discipline		**FS**	
Year of Study	**II**	Semester	**3**	Type of the final evaluation (**E, V**)	**E3**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)		**M**		No. of credits	**4**

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**100**	Total hours of individual study	**44**

Distribution of time pool per week	**Hours**
1. Study of the course material	6
2. Study according with the course support, manuals	8

3. Study of the minimal bibliography	4
4. Additional documentation in the library	2
5. Specific activity for the seminary or laboratory	3
6. Homeworks, translations, etc.	0
7. Preparing for different written exams	8
8. Preparing for oral examinations	0
9. Preparing for the final examination	7
10. Consultations	2
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	0
14. Examinations	2
15. Other activities:	0

Course name	**BACTERIOLOGY (I)**
Specific professional competencies	• Proper knowledge and use of discipline-specific concepts; • Knowledge of the morphological, physiological and biochemical characteristics of bacteria; • Knowledge of the concepts of bacterial genetics; • Knowledge of the relationships of microorganisms with the human host; • Knowledge of the concepts of immunology.
Transversal competencies	• Applying strategies of perseverance, rigor, efficiency and responsibility in work, punctuality and taking responsibility for the results of personal activity, creativity, common sense, analytical and critical thinking, problem solving, etc., based on the principles, norms and values of the code of ethics professional. • Applying interrelationship techniques within a team; amplifying and refining the empathic capacities of interpersonal communication and assuming specific attributions in carrying out the group activity in order to deal / resolve individual / group conflicts, as well as the optimal management of time
General objectives of the discipline	• Students acquisition of the main notions of microorganisms and their role in interrelationship with the human host.
Specific objectives of the discipline	• Knowledge of the main types of bacteria involved in human pathology, appropriating their physiological peculiarities. • Knowledge of the relationships between bacteria and the human body, the mode of action of antibacterial substances and antibiotic resistance.

Course Syllabus		**Hours**
1.	**Course 1.** Introduction to the study of medical microbiology. The object, methods and purpose of microbiology. History of medical microbiology. Romanian Microbiology School. Bacteriology and mycology, components of medical microbiology.	2
2.	**Course 2.** Getting bacterial morphology. The size, shape and grouping of bacteria. Mandatory bacterial structures: nucleus, cytoplasm, cellular coatings. The function of	2

Course Syllabus		Hours
	each structure. Optional bacterial structures: cilia, hairs, capsule, spores. The function of each structure. Bacterial taxonomy. Major bacterial groups.	
3.	**Course 3.** Bacterial physiology. Increased multiplication and destruction of bacteria. Microbial growth curve. Factors influencing bacterial growth. Bacteria cultivation. Bacterial metabolism. Bacterial respiration. Practical applicative elements of notions of bacterial physiology.	2
4.	**Course 4.** The action of physical and chemical factors on bacteria. Physical agents. Heat. The wet heat. Dry heat. Cold. Chilling. Freezing. Drying. Radiation. Ultraviolet. Ionizing radiation. Ultrasound. Mechanical pressure. Osmotic pressure. Chemical agents. The bacteriostatic and bactericidal effect. Antiseptic substances, disinfectants. Substances acting on the cytoplasmic membrane.	2
5.	**Course 5.** Bacterial genetics. Bacterial heredity. Bacterial chromosome. Extra-chromosome elements. Bacterial variability. Bacterial mutation. Transfer of genetic material and recombination. Transposable elements. Bacteriophage, beech-bacteria relations. The lithic and lysogenic cycle. Practical applicative elements on the use of molecular biology techniques in modern microbiological diagnosis.	2
6.	**Course 6.** Antimicrobial substances. Classification of antimicrobial substances: origin of substances. Classification of beta-lactam antibiotics. Mechanisms of action of antimicrobial substances: inhibition of cell wall synthesis; inhibition of the function of the cytoplasmic membrane; inhibition of protein synthesis; inhibition of nucleic acid synthesis.	2
7.	**Course 7.** Bacteria resistance to antimicrobial substances. Chromosome and extra-chromosome resistance. Mechanisms of antibiotic resistance: enzymatic inactivation of antibiotics; resistance through changes in bacteria. Resistance to different types of antimicrobial substances.	2
8.	**Course 8.** Host relations – bacterium. Normal microbial flora of the human body. The importance of normal microbial flora. Skin, digestive tract, respiratory tract, genitourinary tract. Factors that determine the pathogenicity of bacteria. Saprophyte bacteria, pathogenic, the phenomenon of bacterial parasitism. Multiplication, invasiveness, toxigenesis. Exotoxins. Antitoxins and anatoxins. Endotoxins. Extracellular enzymes. Bacterial structures involved in the pathogenicity of bacterial species/strains. Stages of a bacterial infection.	2
9.	**Course 9.** Natural (non-specific) resistance of the human body. Physiological barriers. Nonspecific defence (phagocytosis, complement system). Inflammation. Phases of the inflammatory process.	2
10.	**Course 10.** Specific immunity acquired passively or actively, definition, examples. Organization of the immune system. Central and peripheral organs, localization, structure and role. Cells involved in immune response (lymphocytes, phagocytic mononuclear system, granulocytes), origin, evolution, types and functions. Cytokines.	2
11.	**Course 11.** Antigens. Antigenicity, immunogenicity.	2
12.	**Course 12.** Humoral immune response. Cellular immune response. Evolution, receptors, cellular mechanisms in the immune response.	2
13.	**Course 13.** Antibodies: structure, functions. Antibody production. Antigen-antibody reactions. Principle, types, usein laboratory diagnosis.	2
14.	**Course 14.** Hypersensitivity, definition. Types of HS by humoral mechanism (I, II, III) and cellular (IV), mechanism, highlighting, examples, applications.	2

Laboratory Syllabus	Hours
1. Microbiology laboratory – structure, functions. Equipping the lab. Protective measures in the microbiology lab.	2
2. Methods of sterilization and disinfection. Sterilization control.	2
3. Laboratory diagnosis in microbiology – general scheme. Bacteriological diagnosis (direct). Immunological diagnosis (indirect). General ities on the use of molecular biology in diagnosis.	2
4. Techniques for harvesting, transporting and sowing the main clinical samples. General requirements. Taken from the respiratory tract.	2
5. Hemoculture. The cerebrospinal fluid. Various samples: pus, urine, secretions from the genital tract, from the digestive tract, from the skin and mucous membranes, from the subcutaneous level, otic secretions, ophthalmic.	2
6. Microscopic examination (I) – colors Function of the optical microscope. The technique of microscopic examination of colored smears. Descriptive elements on smears made from pathological products and bacterial cultures.	2
7. Microscopic examination (II) – colours (continued). Native preparations, smears, dyes, colours. The technique of smear execution from pathological products and cultures. Methylene blue coloration, Gram coloration, Ziehl-Nealson coloration.	2
8. Demonstrations, interpretations and practical applications in a bacteriology laboratory belonging to a medical unit.	2
9. Culture environments. Classification of culture media. Presentation of culture media. Common seeding techniques of culture media.	2
10. Bacteria culture characters. Identification of bacteria based on culture, biochemical and metabolic (I) characters. Types of colonies/cultures; hemolysis; production of pigments.	2
11. Identification of bacteria on the basis of culture, biochemical and metabolic (II) characters. Highlighting biochemical characters by differential, multitest environments. Use of chromogenic media.	2
12. Methods of identification of bacteria – antigenic identification, serological tests.	2
13. Testing the sensitivity of bacteria to antibiotics. Diffusion method, dilution method, E-Test. Supervision of antibiotic treatment. Determination of NEI, NEB.	2
14. Practical examination	2

Minimal References:
1. Suportul de curs (în format electronic).
2. Olga Mihaela Dorobăţ – Bacteriologie medicală – Ed. Universitatii “Titu Maiorescu”, Bucureşti 2006
3. Buiuc D., Neguţ M., Tratat de microbiologie clinică, Ed. Medicală, 2009.
4. Carmen Chifiriuc. Microbiologie si virologie medicală, Ed. Univ. București, 2011
5. Metode si standarde pentru laboratoarele de control microbiologic”, Carmen Chifiriuc, Veronica Lazar, Carmen Curutiu, Mihaela Magdalena Mitache, Florina Marinescu, Cristina Croitoru, Luminita Dascalu, ,Ed. Universitatii din Bucuresti, 2015
6. Manual de Micologie Aplicată, Irina Gheorghe, Lia Mara Ditu, Mihaela Magdalena Mitache, Ionela Avram, ISBN Univ. Titu Maiorescu: 978-606-767-065-3, ISBN Hamangiu : 978-606-27-1307-2, 2019

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- The concepts taught to students in courses and practical works are correlated with the scientific information of bibliography regularly updated by the use of specialized publications and multimedia/web sources, corresponding to the expectations of representatives of the epistemic community, professional associations and representative employers in the field of Health.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• Exposure of the material according to the analytical program. Interactive education; multimedia projection of course support
Laboratory	• Exposure, conversation, didactic demonstrations. • Direct work with optical microscopes in the lab, 2 students per microscope. • Staining procedures of different specimens in the lab.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
• Being present to all practical works; • Redoing all of the absences; • Performing the experiments – blade examinations and biochemical reactions.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	60 %
- Responses to the laboratory examination	20 %
- Periodic checks with written exams	20 %
- Continuous testing throught the semester	-
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-

Description of the actual methods of examination – E

- Written paper (descriptive and grid test).

Minimal requirements for grade 5	**Requirements for grade 10**
• promotion of the practical exam. • the appropriation of specialized terminology and its appropriate use by correct response to at least 50%+1 of each synthesis topic. • Correct answers to at least 50% of grid questions	• correct, complete and reasoned answer to all the problems posed by the topics. • Correct answers to all grid questions

Date of completion

25.09.2018

Discipline Coordinator,

Mitache Magdalena, M.D., Ph.D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,	**Laboratory Coordinator**,
Mitache Magdalena, M.D., Ph.D., Lecturer	Mitache Magdalena, M.D., Ph.D., Lecturer Epuran Silviu, M.D., Ph. D. Student, Univ. Assistant

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**VIROLOGY AND PARASITOLOGY (I)**					
Didactic position, name and surname for the Coordinator of the Discipline	**Dragu Laura Denisa, M.D., Ph. D.**					
Didactic position, name and surname for the Coordinator of the Course	**Dragu Laura Denisa, M.D., Ph. D.**					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Dragu Laura Denisa, M.D., Ph. D.**					
Discipline Code	**MLE.2.3.5**	Formative category of the discipline		**FS**		
Year of Study	**II**	Semester	**3**	Type of the final evaluation (**E, V**)		**E3**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits		**2**

No. of Hours per week	**2**	Out of which are Course hours:	**1**	Seminar / Practical Activity / Clinical Stage	**1**
Total of hours in the curriculum	**28**	Out of which are Course hours:	**14**	Seminar / Practical Activity / Clinical Stage	**14**
		Total hours per semester	**50**	Total hours of individual study	**22**

Distribution of time pool per week	**Hours**
1. Study of the course material	6
2. Study according with the course support, manuals	4
3. Study of the minimal bibliography	4

4. Additional documentation in the library	2
5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	0
7. Preparing for different written exams	0
8. Preparing for oral examinations	0
9. Preparing for the final examination	0
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	0
14. Examinations	2
15. Other activities:	0

Course name	**VIROLOGY AND PARASITOLOGY (I)**
Specific professional competencies	• Knowledge and understanding of discipline-specific concepts • Familiarization of students with the main general notions of viral infectious agents. • Acquiring methods of virological diagnosis.
Transversal competencies	• To integrate the theoretical and practical knowledge acquired in the discipline of virology with that obtained in other fundamental disciplines and to use it as a platforme for clinical training. • Stimulation of interdisciplinary collaboration, efficient use of learning resources to increase professional efficiency. • Know how to use information and communication technology.
General objectives of the discipline	• Knowledge of viral structure and replication, pathogenicity of viral infections, methods of virological diagnosis.
Specific objectives of the discipline	• Upon completion of the discipline the student will be able to acquire the morphology and physiology of the main viral infectious agents, data referring to the nonspecific and specific antiinfective response, notions of prophylaxis, methods of diagnostic, to form a team, and to collaborate effectively doctor/patient, to communicate requirements, to prepare materials, to use the specific teaching material and equipment in the virology laboratory.

Course Syllabus		**Hours**
1.	Viruses: definition, origin, general characters, replication, classification	2
2.	Immunity in viruses, humoral and cellular immune response, Antiviral vaccines	2
3.	Orthomixoviruses – influenza viruses, Paramixoviruses	2
4.	Herpesviridae HSV 1 and 2, VZ, EBV and CMV viruses. Human herpetic viruses 6, 7 and 8.	2
5.	Neurotropic viruses. The main families of viruses involved in the etiology of meningitis, encephalitis and viral meningoencephalitis	2
6.	Hepatitisviruses. Hepatitis A, B, C, Delta,	2
7.	HIV/AIDS infection. Viruses and cancer.	2

Laboratory Syllabus		**Hours**
1.	Virological diagnostic algorithm. Cell cultures.	2
2.	Diagnostic methods (serological tests and direct diagnostic methods)	2

Laboratory Syllabus	Hours
3. Laboratory diagnosis of respiratory viral infections	2
4. Laboratory diagnosis of herpes virus infection	2
5. Laboratory diagnosis of viral infection of the central nervous system	2
6. Laboratory diagnosis in viral hepatitis	2
7. Diagnosis in INFECTION of HIV/AIDS	2

Minimal References:
1. Carmen Chifiriuc. Microbiologie si virologie medicală, Ed. Univ. București, 2011
2. Virusologie Medicala. C. Cernescu,Ed. Medicala, 2012
3. Fields Virology, Knipe M David (eds)a 5-a editie, editura Walters Kluweer Lippincot Williams, 2007
4. Mescher AL. Junqueira's Basic Histology: Text and Atlas, 14th edition McGraw-Hill Medical, 2016
5. Pawlina W. Histology A Text and Atlas, 7th edition, 2016
6. Alberts B, Johnson A, Lewis J, Raff M, Roberts K, Walter P. Molecular Biology of the Cell. 6th edition, Garland Science, 2014
7. Gartner LP, Hiatt JL, Color Atlas of Histology 6th Edition, Wolters Kluwer, 2013

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- The acquisition of basic knowledge in virology will enable the acquisition of the necessary skills to carry out a practical activity in the clinical laboratory.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• Interactive scheduled education; multimedia projection of course support
Laboratory	• Practical and theoretical applications. • Individual work of students or group depending on the practical work.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
• to know the basics of viruses • for admission to practical null examinations the student must perform all practical works.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	80 %
- Responses to the laboratory examination	20 %
- Periodic checks with written exams	-
- Continuous testing throught the semester	-
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-
Description of the actual methods of examination – E - Written paper (descriptive test with 2 subjects and a quiz test with 10 questions).	

Minimal requirements for grade 5	Requirements for grade 10
• knowledge of the basics of viruses • knowledge of the main methods used in virological diagnosis • full exposure of half of the subjects received in the exam	• ability to make a correct diagnosis in laboratory tests • full exposure of all subjects received in the exam

Date of completion

25.09.2018

Discipline Coordinator,

Dragu Laura Denisa, M.D., Ph. D.

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Dragu Laura Denisa, M.D., Ph. D.

Laboratory Coordinator,

Dragu Laura Denisa, M.D., Ph. D.

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**BEHAVIOURAL SCIENCES, PSYCHOLOGY AND MEDICAL SOCIOLOGY**					
Didactic position, name and surname for the Coordinator of the Discipline	**Gabriela Marian, M.D., Ph. D., Univ. Professor**					
Didactic position, name and surname for the Coordinator of the Course	**Gabriela Marian, M.D., Ph. D., Univ. Professor**					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Gabriela Marian, M.D., Ph. D., Univ. Professor** **Focșeneanu Brândușa, M.D., Ph. D., Univ. Assistant**					
Discipline Code	**MLE.2.3.6**	Formative category of the discipline			**CS**	
Year of Study	**II**	Semester	**3**	Type of the final evaluation (**E, V**)		**E3**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)				**M**	No. of credits	**3**

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**75**	Total hours of individual study	**19**

Distribution of time pool per week	**Hours**
1. Study of the course material	2
2. Study according with the course support, manuals	2

3. Study of the minimal bibliography	2
4. Additional documentation in the library	2
5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	2
7. Preparing for different written exams	0
8. Preparing for oral examinations	0
9. Preparing for the final examination	2
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	1
14. Examinations	2
15. Other activities:	0

Course name	**BEHAVIOURAL SCIENCES, PSYCHOLOGY AND MEDICAL SOCIOLOGY**
Specific professional competencies	• Knowledge and understanding of discipline-specific concepts; • Familiarization of students with the main concepts and notions regarding normal-abnormality dichotomy, bio-psycho-social factor involved in the genesis of normal and pathological human behavior. • Acquiring methods and techniques for evaluating the patient. • Practicing different styles of approach of the mental patient for better collaboration with him. • Developing a positive attitude regarding the specifics of this discipline, as well as the characteristics of the activity and the relationship with the sick.
Transversal competencies	• Demonstrate concern for continuous professional improvement by training specific thinking and practice skills in human psychology and psychopathology in order to adapt professional competences to the dynamics of the social context to demonstrate respect for and development of professional values and ethics • Stimulating interdisciplinary collaboration, efficient use of learning resources to increase professional efficiency. • Participate in projects of a scientific nature compatible with the requirements of integration into European education
General objectives of the discipline	• Presentation of the biological, psychological and social bases of human behavior. • Knowledge, understanding of the concepts, theories and basic methods of the field and area of specialization; their appropriate use in professional communication.
Specific objectives of the discipline	• Understanding the genetic, biochemical, neuroendocrine and chronobiological elements that underpin human behavior; • Understanding the psychological elements (normal and pathological personality theories, defense mechanisms) that underpin human behavior; • Understanding the normative, ethical and legal social components of behaviour.

Course Syllabus	Hours
1. Introduction to the study of human behavioral sciences. The ratio of the different categories of biological, psychological and social factors underlying human behavior	2
2. Biological determinants of human behavior. Genetic factors • defining the problem; • the main types of genetic studies; • genetics of the main psychiatric disorders with behavioural expressiveness; • the problem of assessing genetic risk	2
3. Biological determinants of human behavior. Neuroanatomical factors • history of the study of the neuroanatomy of human behavior: the case of Phineas Gage • the main behavioural responsibilities of the frontal, parietal, temporal and occipital cerebral lobes. • Behavioral involvements of the limbic system.	2
4. Biological determinants of human behavior. Biochemical factors (brain neurotransmitters) • Serotonin system and its behavioral significance • Noradrenergic system and its behavioral significance	2
5. Biological determinants of human behavior. Biochemical factors (brain neurotransmitters) • Dopaminergic system and its behavioral involvements • The role of other neurotransmitters: GABA system, cholinergic system, glutamate, etc.	
6. Biological determinants of human behaviour. Endocrine and chrono-biological factors. • The role of the hypothalamic-hypophysio-corticoadrenal axis in modulating humanbehavior. • The great biological rhythms and their behavioralsignificance.	2
7. Psychological factors that influence human behavior. Normal personality: typological patterns, behavioral meanings.	2
8. Pathological personality: concept, typology.	
9. Psychological factors that influence human behavior. Personality disorders; typology of personality disorders according to international classification.	2
10. Phsychological factors that influence human behavior. Psychological defense mechanisms.	2
11. Psychosocial stress. Stress ethiopathogeny. Stress factors (classification, magnitude, other characteristics). Coping mechanisms.	2
12. Sexual behaviour, dietary behaviour, additive behaviour and aggressive behaviour:bio-psycho-social factors involved.	2
13. Human behavior in disease conditions. Psychsomatic relationship and some behavioral consequences. Human behaviour and therapeutic responsiveness. The phenomena of placebo and nocebo.	2
14. Regulatory social factors involved in human behaviour. Elements of bioethics. The problem of euthanasia and assisted suicide. Codes of ethics. The notion of malpractice. Legal approaches.	2

Laboratory Syllabus	Hours
P1. (theoretically) 1.Definition of health status. Individual concerns for the cultivation of health status ; 2.Immunogenic personality traits; 3.Psychobehavioral risk factors for the disease with psychogenic impact. (practical)1. Questionary for assessing attitudes towards health problems; 2.Questions concerning immunogenic traits (optimism, consistency, robustness, etc.); 3.Consumer questions (alcohol, tobacco, etc.)	2

Laboratory Syllabus	Hours
P2. (theoretically) 1.Involvement of the psychic factor in pathogenesis. Explanatory models (Engel, Fisher, Contrada); 2.Study of the involvement of conditioned reflexes in pathogenesis and in triggering the manifestations of the disease; 3.Functional disorders. (practical) 1.Polygraph; 2.Functional disorder questionnaire (GBB-24); 3.Table Dongier; 4.THE HAD Questionnaire.	2
P3. (theoretically) 1.Psychic stress: definition, classification; 2.Copingmechanisms; 3.Control locus; 4.Social support and vulnerability to stress. (practical) 1.Questionary Columbia University; 2.Question for the evaluation of social support.	2
P4. (theoretically) 1.Principles of anti-stress conduct; 2.Humor and music : elements of sanogenesis. (practical) 1.Anti-stress programs (New Start, stress energy compartments (Birkrnbihl)); 2.Elements of behavioural psychotherapy (e.g. anti-smoking).	2
P5. (theoretically) 1.Definitions of the disease; discussions on the three hypostases of the disease, postulated by Leriche; 2.Analysis of the causes of the patient's reluctance to present to consultations; 3."Circuit of the sick"; 4.Quality of life indices. (practical)1.Recorded interviews and discussions with patients regarding psychosomatic discomfort and existential impasse caused by illness; 2.Quality of life (MOS-36 and Junniper).	2
P6. (theoretically) 1.Medical-sick interpersonal relationship; 2.Principles of verbal and non-verbal intelligent communication; 3. Types of questions (open, closed, suggestive). (practical)1.MMPI test scales; 2.Interviews – exemplification, types of anamnesis.	2
P7. (theoretically) 1.Definition of psychosomatic disorders, somatopsychic disorders, psychosomatic diseases; 2.Integrative medicine. (practical) 1.Psychobehavioral Type Assessment Questionnaire A; 2.Maastricht Questionnaire (exhaustion); 3.Criteria for establishing the psychogenic etiology of a psychosomatic disease; 4.Algorithm of psychosomatic approach of the sick.	2
P8. (theoretically) 1.Supportive psychotherapy. 2.Theoretical notions and principles of application of supportive psychotherapy by the family doctor. (practical)1.Training autogen Schultz; 2.Psychosomatic training (Luban-Plozza); 3.Principles of group psychotherapy in psychosomatic diseases – examples.	2
P9. (theoretically) 1.Types of listening. Abstract-concrete isomorphism. (practical)1.Musicotest W – evaluation of the somatization of the musical message.	2
P10. (theoretically) 1.Principles for the selection of musical pieces for music therapy (practical)1.Musicotest 2 (BBSS).	2
P11. (theoretically) 1.Psychological problems generated by the drug; 2.The Placebo effect; 3.Dependence on the drug; 4.Therapeutic compliance : psychological factors involved and optimization conditions. (practical) 1.Therapeutic compliance questionnaire; 2.Interview with corticodependent patients (audio recording).	2

Laboratory Syllabus	Hours
P12. (theoretically)1.Sexual dynamics disorders – psychological causes. 2.Psychological problems of the couple with psychosomatic impact. (practical) 1.Comatorean Văleanu-Daniel for "female psychosomatic approach"; 2.Questionary on relationships within the couple.	2
P13. (theoretically) 1.Psychosomatic peculiarities of elderly persons; 2.Psychological problems of the assistance of the elderly. (practical) 1.The Minimental State Examination Questionnaire; 2.The Iamandescu-Popa-Velea questionnaire investigating the involvement of psychogenic factors in longevity.	2
P14. (theoretically)1.Integrating the medical student into the psychological assistance of psychosomatic patients. (basically) The Monte Verita model of approach inguding psychosomatic patients.	2

Minimal References:	
1.	Iamandescu I.B. Stresul psihic din perspectivă psihologică, Ed. Infomedica, Bucuresti, 2002
2.	Iamandescu I.B. Manual de psihologie medicală, Ed. Infomedica, Bucuresti, 2010
3.	Popa-Velea O. Stiintele comportamentului uman. Aplicatii în medicină, Ed. TREI, Bucuresti, 2010
4.	Prelipceanu D., Mihăilescu R., Teodorescu R. (editori) Tratat de sănătate mintală, Editura Enciclopedica, Bucuresti, 2000
5.	Marian G., Baloescu A. Comportamentul agresiv, Editura Tritonic, Bucuresti, 2009
6.	Marian G., Neagu C.-Fundamente ale psihologiei manageriale, Ed. Tritonic, Bucuresti, 2009
7.	Fadem B. Behavioral science, 7nd edition, Editura Lippincott Williams & Wilkins, 2017
8.	Sahler O.J, Carr J.E (editors) – The behavioral sciences and health care, 3rd edition, 2012
9.	Feldman M.D., Christensen J.F, Behavioral medicine – A guide for clinical practice, 3rd edition, 2008
10.	Official course

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- The course allows integration into a responsible professional environment, good collaboration with specialists from various fields, the ability to provide clinical assistance in a variety of problems, the development of applied research programs that bring an added knowledge in understanding the mental functioning in the situation of suffering.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• Presentation of study material according to the analytical curriculum • Case presentations • Interactive discussions
Laboratory	• Presentation and application of questionnaires • Solving the problem raised by the course material

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
• Minimum 11 practical works out of 14 • Analysis of the course material presented • Notions of sanogenesis, clinical interview, doctor-patient relationship • Principles of psychotherapy • Principles of scientific reporting

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	80 %
- Responses to the laboratory examination	5 %
- Periodic checks with written exams	5 %
- Continuous testing throught the semester	5 %
- Projects / Translations / Posters / Essays, etc.	5 %
- Other activities:	-

Description of the actual methods of examination – E

- Written paper (descriptive) with 10 subjects.

Minimal requirements for grade 5	**Requirements for grade 10**
Promotion of individual practical examination and presentation of a scientific report about: • Differences Eustress and Distress • Identification of pathological behaviour and associated risk factors; principles of sanogenesis • Medical interview – peculiarities in depression, anxiety, somatization, simulation/disguise, suicide, psychomotor agitation • Building a Therapeutic Alliance • Psychosomatic disorder vs. somato-psychic disorder • Psychological peculiarities in various somatic disorders **Correct completion of subjects in the final exam**	***Promotion of individual practical examination and presentation of a scientific report.*** ***In-depth notions about:*** • Human behaviour in disease conditions. Psychic relationship – somatic and some behavioral consequences. Human behavior and therapeutic responsibility. • Doctor-sick interpersonal relationship; Principles of verbal and non-verbal intelligent communication; Types of questions (open, closed, suggestive) in the psychiatric interview. • Psychological problems generated by the drug; Placebo effect; Nocebo effect; Pseudoplacebo effect; Drug dependence; Therapeutic compliance : psychological factors involved and optimization conditions. • Sexual dynamics disorders – psychological causes; Psychological problems of the couple with psychosomatic impact. • Food disorders • Addictions - psychological and somatic problems

	• Psychosomatic peculiarities of elderly persons; Psychological problems of the assistance of the elderly • Functional disorders/somatoforms • Psychosomatic peculiarities in various medical conditions • Behaviour disorders specific to personality disharmonies • Aggression and suicide • Simulated behavior, oversimulated, metasimulated, disguised **Correct completion of all final exam requirements** • **If applicable, the student who participated in translation/scientific articles activities receives 20% on the final grade**

Date of completion

25.09.2018

Discipline Coordinator,

Gabriela Marian, M.D., Ph. D., Univ. Professor

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Gabriela Marian, M.D., Ph. D., Univ. Professor

Laboratory Coordinator,

Gabriela Marian, M.D., Ph. D., Univ. Professor
Focșeneanu Brândușa, M.D., Ph. D., Univ. Assistant

Department approval date

30.09.2018

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**MEDICAL SPECIALIZED COMMUNICATION IN MODERN FOREIGN LANGUAGES (I)**				
Didactic position, name and surname for the Coordinator of the Discipline	**Mirela Radu, Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Course	**Mirela Radu, Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Mirela Radu, Ph.D., Lecturer**				
Discipline Code	**MLE.2.3.7**	Formative category of the discipline		**CS**	
Year of Study	**II**	Semester	**3**	Type of the final evaluation (**E, V**)	**V3**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits	**2**

No. of Hours per week	**1**	Out of which are Course hours:	**-**	Seminar / Practical Activity / Clinical Stage	**1**
Total of hours in the curriculum	**14**	Out of which are Course hours:	**-**	Seminar / Practical Activity / Clinical Stage	**14**
		Total hours per semester	**50**	Total hours of individual study	**36**
Distribution of time pool per week					**Hours**
1. Study of the course material					4
2. Study according with the course support, manuals					4

3. Study of the minimal bibliography	4
4. Additional documentation in the library	4
5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	2
7. Preparing for different written exams	2
8. Preparing for oral examinations	2
9. Preparing for the final examination	2
10. Consultations	2
11. In the field documentation	2
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	2
14. Examinations	2
15. Other activities:	-

Course name	**SPECIALTY COMMUNICATION IN ENGLISH (I)**
Specific professional competencies	1. Knowledge and understanding (knowledge and appropriate use of discipline-specific notions): - As an important discipline in the curriculum, the aim is both to revise the linguistic and grammatical knowledge of the general English language, as well as to assimilate and fix the elements of specialized, medical language. The seminar aims, therefore, to review the grammatical and lexical structures commonly found in the medical language, through readings of texts, dialogues and applied exercises, interactive graduated by the level of difficulties, leading to good communication in the field. 2. Explanation and interpretation (explanation and interpretation of ideas, projects, processes, as well as theoretical and practical contents of the discipline): - Developing the ability to understand the written text (Reading): - read, translated, answered questions about the text; - identification of key terms/ elements of cohesion/ coherence in the text; - Development of hearing-based understanding capacity : - identification of correct pronunciation and intonation; identification of the register (formal/ informal);recognition of fundamental communication strategies (introductory and conclusive formulas); - Development of oral expression capacity (Speaking): identification and correct use of basic language structures corresponding to different acts of language; correct use of notional and instrumental units; correct use of pronunciation and intonation rules. - Development of writing capacity: correct use of introductory elements; adaptation to the communication situation 3. Instrumental-applicative (design, management and evaluation of specific practical activities: use of methods, techniques and tools of investigation and application): - identification and use of communication strategies, methods and techniques in the medical process;

	4. Atitudinal (manifestation of a positive and responsible attitude towards the scientific field / centered on democratic values and relations / promotion of a system of moral and civic cultural values / optimal and creative exploitation of one's own potential in scientific activities / involvement in institutional development and in promoting scientific innovations / engaging in partnership relations with other people - institutions with similar responsibilities / participation in their own professional development): - the manifestation of a positive and responsible attitude towards the scientific field; - promoting a system of cultural, moral and civic values; - optimal and creative exploitation of one's own potential in scientific activities; - involvement in institutional development and promotion of scientific innovations; - engaging in partnership relationships with other people - institutions with similar responsibilities; • participation in their own professional development.
Transversal competencies	• Realistically solving - with both theoretical and practical argumentation - common professional situations, with a view to solving them effectively and ethically.
General objectives of the discipline	• Familiarization of students with the notions and concepts characteristic of medical terminology; • Training of theoretical and practical skills in themedical field.
Specific objectives of the discipline	• The work of the seminar is based on the reading of medical texts, followed by the conversation, problematization and appropriation of the notions of medicine through discovery. • All this is done by explanation, deductive methods, association, exemplification, presentation, role-playing games, repetitive practice, drills, schematic development, visualization techniques, frontal, individual activities.

Course Syllabus	**Hours**
-	-

Laboratory Syllabus	**Hours**
1. Infectious diseases: Whooping cough, Chicken pox, Measles, Mumps, Small pox, Polio(myelitis), Diphtheria	2
2. Brief description of the Nervous System	2
3. Alternative medicine techniques, Word building and derivation in medical terminology	2
4. Leukemias	2
5. Neurological disorders: Alzheimer's Disease, Broca Aphasia, Cerebello-Olivary Degeneration of Holmes, Huntington Disease, Parkinson's Disease, Parinaud Syndrome, Tourette Syndrome	2
6. Fetal diagnosis	2
7. Congenital Fetal Infections	2
8. Stages of a child's development	2
9. Genito-urinary disorders in females	2

Laboratory Syllabus	Hours
10. Genito-urinary disorders in males	2
11. Effects of Pregnancy on the Mother, APGAR score	2
12. Vessels of the Blood Vessels	2
13. Cardio-vascular system; Diagnostic, Procedural and Laboratory term	2
14. Final revision	2

Minimal References:

1. Valerie C. Scanlon, Essentials of anatomy and physiology, 5th Edition, F.A. Davis Company, Philadelphia, 2007
2. Van De Graaff, Human Anatomy, 6th Edition,The McGraw−HillCompanies, 2001
3. John T. Hansen, Netter's Atlas of human physiology, 1st Edition, Icon Learning Systems, 2002
4. Sylvia S. Made, Understanding Human Anatomy & Physiology, 5th Edition, The McGraw−Hill Companies, 2004
5. Heather Bateman, Ruth Hillmore, Daisy Jackson, Dictionary of medical terms, 4th Edition, A & C Black, London, 2007
6. Nina Thierer, Deborah Nelson, Judy K. Ward, LaTanya Young, Medical Terminology
7. Language for Health Care, The McGraw-Hill Companies, Inc., 2010
8. www.britannica.com/science/human-body
9. Official course

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:

- The future practical activity of the doctor is based not only on theoretical and practical knowledge, but also on knowledge of English, patience and special conscientiousness, which is acquired through studies started in the preclinical discipline Specialized communication inEnglish.
- Matter provides the doctor with the necessary basic knowledge of the medicalcontext.

Disemination of the information

Type of activities	Didactic Methods Employed
Course	• Interactive scheduled education; multimedia projection of course support
Laboratory	• Practical demonstration of the clinical aspects of some diseases but also the specifics of important systems of the human body.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:

- to know the basics of medical terminology in English;
- have no more than 20 % unmotivated and unrecovered absences from practical works.

Consideration points for computing the final score:	Share of the final score (in %) (Total = 100%)
- Responses to the final exam	50 %
- Responses to the laboratory examination	20 %
- Periodic checks with written exams	20 %
- Continuous testing throught the semester	10 %

- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-

Description of the actual methods of examination – E

- Written paper (descriptive and grid test).

Minimal requirements for grade 5	Requirements for grade 10
• promoting the practical exam • promoting control work • recovery of absences from practical work • knowledge of the basics of the terminology taught	• in-depth knowledge of the notions taught

Date of completion

25.09.2018

Discipline Coordinator,

Mirela Radu, Ph.D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Mirela Radu, Ph.D., Lecturer

Laboratory Coordinator,

Mirela Radu, Ph.D., Lecturer

Department approval date

30.09.2018

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**PHYSICAL EDUCATION (I)**					
Didactic position, name and surname for the Coordinator of the Discipline	**Urichianu Adrian Ion, Ph.D., Assoc. Professor**					
Didactic position, name and surname for the Coordinator of the Course	-					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Urichianu Adrian Ion, Ph.D., Assoc. Professor**					
Discipline Code	**MLE.2.3.8**	Formative category of the discipline			**CS**	
Year of Study	**II**	Semester	**3**	Type of the final evaluation (**E, V**)		**V3**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits		**1**

No. of Hours per week	**1**	Out of which are Course hours:	-	Seminar / Practical Activity / Clinical Stage	**1**
Total of hours in the curriculum	**14**	Out of which are Course hours:	-	Seminar / Practical Activity / Clinical Stage	**14**
		Total hours per semester	**25**	Total hours of individual study	**11**

Distribution of time pool per week	**Hours**
1. Study of the course material	0
2. Study according with the course support, manuals	0

3. Study of the minimal bibliography	0
4. Additional documentation in the library	0
5. Specific activity for the seminary or laboratory	3
6. Homeworks, translations, etc.	0
7. Preparing for different written exams	0
8. Preparing for oral examinations	0
9. Preparing for the final examination	2
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	2
14. Examinations	2
15. Other activities:	0

Course name	**PHYSICAL EDUCATION (I)**
Specific professional competencies	• Modular design (Physical and sports education, Sport and motor performance, Kinetotherapy and special motor skills) and planning the basic contents of the field with interdisciplinary orientation • Organization of the integrated curriculum and training and learning environment with an interdisciplinary focus (Physical and Sports Education, Sport and Motor Performance, Kinetic Therapy and Special Motor skills) • Assessment of physical growth and development and quality of motor skills according to the specific requirements/objectives of physical and sports education, attitude towards independent exercise • Assessment of the level of training of practitioners of physical education and sport activities
Transversal competencies	• Organisation of physical and sports education activities for persons of different ages and levels of training under qualified assistance conditions, in compliance with the rules of ethics and professional ethics • Efficient and effective performance of work tasks for the organisation and conduct of sports activities • Operating with digital programs, documenting and communicating in an international language of movement
General objectives of the discipline	• Optimization of motor capacity according to the requirements of the professional profile; • Knowledge of ways of preventing, correcting and recovering diseases and deficient attitudes encountered in the medical profession;
Specific objectives of the discipline	• The role of physical education in the daily program of the student, future doctor; • Training of the ability to exercise independently in your spare time; • The objectives listed can be achieved by using methods and means specific to physical education and sport. • Improving basic motor skills (strength, speed, stamina, skill);

Course Syllabus	Hours
-	-

Laboratory Syllabus		Hours
1.	Communication of control requirements and rules. Organization of the student collective by groups. Light runs alternated with mobility exercises.	2
2.	Circuit of general physical training (fixed scales, medicine balls, gymnastics benches, acrobatics). Endurance run: B = 5 minutes; F = 4 minutes	2
3.	General physical training circuit (pair exercises: free and with medicinal balls, acrobatics). Endurance run: B = 6 minutes; F = 5 minutes	2
4.	General physical training circuit conducted outdoors (stadium stairs, ropes, motor games). Endurance run: B = 7 minutes; F = 6 minutes	2
5.	Development of motor skills: resistance-speed: - exercises from the school of running, jumping, throwing; long-term running (amounting to 8 -10 min.); accelerated running (up to 50 m); long jump from the spot.	2
6.	Exercises and exercise structures for learning technical-tactical elements and procedures in sports games. Table tennis, bilateral game. Exercises of selective influence of the musculoskeletal system and general physical development: exercises of elasticity and joint and muscle mobility.	2
7.	Control rules and samples	2
8.	Communication of control requirements and rules. Organization of the student collective by groups. Light runs alternated with mobility exercises.	2
9.	Circuit of general physical training (fixed scales, medicine balls, gymnastics benches, acrobatics). Endurance run: B = 5 minutes; F = 4 minutes	2
10.	General physical training circuit (pair exercises: free and with medicinal balls, acrobatics). Endurance run: B = 6 minutes; F = 5 minutes	2
11.	General physical training circuit conducted outdoors (stadium stairs, ropes, motor games). Endurance run: B = 7 minutes; F = 6 minutes	2
12.	Development of motor skills: resistance-speed: - exercises from the school of running, jumping, throwing; long-term running (amounting to 8 -10 min.); accelerated running (up to 50 m); long jump from the spot.	2
13.	Exercises and exercise structures for learning technical-tactical elements and procedures in sports games. Table tennis, bilateral game. Exercises of selective influence of the musculoskeletal system and general physical development: exercises of elasticity and joint and muscle mobility.	2
14.	Control rules and samples	2

Minimal References:

1. CÎRSTEA, GH., (2003), *Programming and planning in school physical and sports education,* Universe Publishing House, Bucharest;
2. CERGHIT, I., (1997),*Educational Methods,*Didactic and Pedagogical Publishing House, Bucharest,.
3. DRAGNEA, A., BOTA, A., (2010), *Theory of Motor Activities*, Didactic and Pedagogical PublishingHouse, Bucharest;
4. Dragu M., - *Motor Games*, Publishing House of the University Foundation "Lower Danube" Galati, 2002.
5. Dragu M., - *Motion Games*, Galati Academic Publishing House, 2006.

Minimal References:
6. Ionescu, A., Mazilu,V.,(1971),*Physical Exercise in Health Service*, Stadion Publishing House, Bucharest;
7. Merghes P,Teghiu A.; *Medical gymnastics for the prevention and correction of physical deficiencies;* Ed Mirton 2006
8. Urichianu,A.,I., Ulareanu M., Georgescu, C., Bodybuilding Exercises, Ed. Prouniversitaria, 2015.
9. Urichianu, A., s.a. Theory and Methodology of Physical Education and Sport, Ed. Discobol, 2018
10. CÎRSTEA, GH., (2003),*Programming and planning in school physical and sports education,* Universe Publishing House, Bucharest;
11. CERGHIT, I., (1997),*Educational Methods,*Didactic and Pedagogical Publishing House, Bucharest,.
12. DRAGNEA, A., BOTA, A., (2010),*Theory of Motor Activities*, Didactic and Pedagogical PublishingHouse, Bucharest;

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- Through its contents, the discipline has a pronounced pragmatic character, contributing to the training of specialists in the field of specialization through the following: harmonious development of the organism; optimisation of health status; preventing the installation of global and segmental physical deficiencies, training and maintaining the correct attitudes of the body; stimulating students' interest in systematic and independent exercise individually and collectively on a daily or weekly basis; creating a habit of complying with sports hygiene and accident prevention rules; developing self-defense and self-exceeding capacity

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• n/a
Laboratory	• Sports practice with specialized sports equipment.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
• 25 abdomens; 30 rear; bilateral sports game of your choice (football, volleyball, table tennis) • 2 reports made and supported during practical hours, admitted with a minimum grade of 5 (corresponding to the grade allowed)
Specific conditions for carrying out the theoretical and practical activities of the discipline: • For the acquisition by the student of the minimum level of competences specific to the discipline we consider it necessary to participate interactively in the seminar.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	70 %
- Responses to the laboratory examination	10 %
- Periodic checks with written exams	10 %
- Continuous testing throught the semester	10 %
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-
Description of the actual methods of examination – E	

- Direct evaluation in the sports arena	
Minimal requirements for grade 5	**Requirements for grade 10**
• Passed/Rejected system	• Passed/Rejected system

Date of completion

25.09.2018

Discipline Coordinator,

Urichianu Adrian Ion, Ph.D., Assoc. Professor

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Urichianu Adrian Ion, Ph.D., Assoc. Professor

Laboratory Coordinator,

Urichianu Adrian Ion, Ph.D., Assoc. Professor

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**ANATOMY AND EMBRYOLOGY (II)**				
Didactic position, name and surname for the Coordinator of the Discipline	**Tudorache Ioan Sorin, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Course	**Tudorache Ioan Sorin, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Vasilică Cristescu, M.D., Ph. D., Assoc. Professor** **Hârşovescu Tudor, M.D., Ph. D., Lecturer** **Dincă Gabi-Valeriu, M.D., Ph. D., Lecturer** **Tudorache Ioan Sorin, M.D., Ph.D., Lecturer** **Köver Zoltan Janos, M.D., Ph.D., Univ. Assistant** **Coroescu Mirela, M.D., Ph.D., Univ. Assistant**				
Discipline Code	**MLE.2.4.8**	Formative category of the discipline		**FS**	
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)	**E4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)		**M**		No. of credits	**4**

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**100**	Total hours of individual study	**44**

Distribution of time pool per week	**Hours**
1. Study of the course material	7
2. Study according with the course support, manuals	7

3. Study of the minimal bibliography	7
4. Additional documentation in the library	7
5. Specific activity for the seminary or laboratory	7
6. Homeworks, translations, etc.	0
7. Preparing for different written exams	0
8. Preparing for oral examinations	0
9. Preparing for the final examination	5
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	2
14. Examinations	0
15. Other activities:	0

Course name	**NEUROANATOMY. ANATOMIC BASIS OF MEDICAL PRACTICE**
Specific professional competencies	• Recognition and identification: - the main structures of the central nervous system. - the main structures of the sense organs. • Exploration by modern imaging methods of the structures of the central nervous system. • Recognition of the main lesions of the central nervous system, clinical applications. • Deepening the notions of clinical and topographical anatomy to be used in year III in clinical disciplines. • Preliminary conditions for the acquisition of specific professional skills: fundamental notions of anatomy and physiology acquired in the discipline Anatomy and embryology in previous semesters.
Transversal competencies	• Accommodating the student with medical terminology. Accommodation to the specifics of medical activity through oral presentations both during the semester and in the exam. Stimulating teamwork through student participation in dissection, active participation in the Student Circle of Anatomy, elaboration of scientific papers. "Anatomy is the science of the living form" (Francisc Rainer) – the implementation of notions of functional anatomy and the establishment of anatomical-clinical correlations.
General objectives of the discipline	• Presentation of the notions of anatomy of the central nervous system and sense organs.
Specific objectives of the discipline	• Linking notions of anatomy acquired through courses, practical works, consultation of bibliography and iconography with dissection study of corpses and modern presentations. Presentation of notions of living anatomy, palpations, discoveries, clinical anatomy and modern imaging.

Course Syllabus		**Hours**
1.	Introduction to the study of the nervous system.	2
2.	Development of the nervous system.	2

Course Syllabus	Hours
3. Substance of the spinal cord.	2
4. Ascending paths.	2
5. Spinal and encephalic meninges. The ventricular system. The cerebrospinal fluid. Vascularisation of the spinal cord.	2
6. The grey substance of the brain stem. Reticulated substance.	2
7. The cerebellum.	2
8. Functional anatomy of the diencephalus. Thalamus. The hypothalamus, the metathalamus, the epithalamus, the subtalamus. Epiphysis glands, hypophysis. The hypothalamic-hypophysic port system.	2
9. The structure of the brain cortical layer. Receiving, vegetativeand associated areas. The olfactory path. The limbic system.	2
10. Motor cortical areas, descending pathways (pyramidal, extrapyramidal).	2
11. The auditory path. The vestibular path. The taste path.	2
12. The structure of the retina, the visual pathway.	2
13. Clinical anatomy of arteries andveins, ccollateral cicullation– recapitulation.	2
14. Clinical anatomy of lymphatics, lymphatic teritory and drainage paths – recapitulation.	2

Laboratory Syllabus	Hours
1. Central Nervous System (CNS). Spinal nerve. Medullary vegetative reflexes. Opening of the vertebral canal – laminectomy. Spinal meninges. The cerebrospinal fluid. Clinical anatomy of spinal cordand spinal meninges. External configuration of spinal cord.	2
2. Substance of the spinal cord.	2
3. The white substance. Vascularisation of the spinal cord.	2
4. Opening the skull. Encephalic meninges. Venous sinuses of the hard mater. Configuration of the external stem. Cranial nerves – apparent origin, trajectory.	2
5. Nuclear columns of the brain stem. White substance of the brain stem. The IV ventricle. The study of the brain stem sections.	2
6. Cerebellum, external configuration. White and grey substance of the cerebellum.	2
7. Diencephalus, external configuration, components. Ventricle III. Talamus, metatalamus, subtalamus, epithalamus, epiphysis gland. Hypothalamus, pituitary gland, hypothalamic-hypophysic port system.	2
8. Brain hemispheres, external configuration. Side ventricles. Circulation of the cerebrospinal fluid.	2
9. White substance of the cerebral hemispheres. The study of the encephalus sections. Hippocampus, the amygdalian nucleus. The striated body. The study of the encephalus sections. Clinical and imaging anatomy of the CNS.	2
10. Eyeball, structure, annexes.	2
11. External ear, medium, internal, structure.	2
12. Clinical anatomy of the walls and chest cavity – recap.	2
13. Clinical anatomy of the walls and abdomino-pelvin cavity – recap.	2
14. Clinical anatomy of the limbs – recap.	2

Minimal References:
1. Neuroanatomie – Mihai Tanasi, Editura Universitatii Titu Maiorescu, 2011
2. Anatomia funcţională a sistemului nervos – Armand Andronescu, Editura Infomedica 1998

Minimal References:
3. Anatomia omului, Sistemul nervos central, Lucrari practice – sub redactia Prof. A. Ispas, Editura Universitara Carol Davila Bucuresti 2005
4. Atlas de anatomia omului – Sistemul nervos central – Viorel Ranga, Radu Dimitriu, Editura Didactica si Pedagogica 1993
5. Core Text of Neuroanatomy – Carpenter 2002
6. Anatomia dezvoltarii omului – Armand Andronescu, Editura Didactica 1992
7. Anatomia lui Gray pentru studenţi – A. Wayne Vogl, Adam W. M. Mitchell, Richard L. Drake, Elsevier, 2016
8. Anatomie clinică – fundamente şi aplicaţii – Keith L. Moore, Arthur F. Dalley, Anne M.R. Agur, Editura Calisto 2012
9. Langman's medical embryology - 2016
10. Official course

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- In carrying out the analytical programmes for both the course and for practical work, we took into account the ways of studying anatomy in the higher education institutions of the country and in the European Union. In order to harmonise the preclinical discipline sheets, we organized working sessions at the Department level, identifying the optimal ways of linking the educational process. Following consultations with hospital managers and private administrators of firms providing clinical and paraclinical medical services, we have given greater importance to the practical, clinical, radiological and imaging anatomy for easier integration of graduates into the labour market.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• Laptop, video projector. Modern PowerPoint presentation of the course. • Interactive course. • Anatomical-clinical correlations. • Answers to students' questions.
Laboratory	• Laptop, video projector. • Modern presentation using magnetic boards, flipchart, Power Point, virtual dissection software. • Classical study by dissection, use of specific teaching materials: skeleton, bone collection, anatomical preparations, sections. Interactive practical work. • Getting radiological anatomy and imaging, clinical anatomy. • Practical embryology work using both histological preparations and digital presentation. Answers to students' questions.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
Minimum standard of performance - minimum scale of activities to be performed by the student in practical work - the presence of the student at a minimum of 70 % practical work and the restoration of all absences or (including absences from evaluations during the semester)- the carrying out of

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
references for the understanding of the basic stakes of the practical work in question. - identification of the basic anatomical formations on the teaching materials used (skeleton, bone collection, corpses, preparations of anatomic structures, iconography, radiological iconography and imaging) - interactive participation in the practical work; answers to the questions of the teacher who has practical work, discussions. **Minimum scale of activities to be performed by the student in the practical exam in order to be admitted to the exam (final verification): obtaining the average 5 on the pactical exam of anatomy** - The practical examination of anatomy consists in identifying a minimum of 9 out of 18 anatomical formations on teaching materials (anatomical preparations, sections of encephal, iconography, results radiological and imaging examinations).
Specific conditions for carrying out the theoretical and practical activities of the discipline: - For the acquisition by the student of the minimum level of competences specific to the discipline we consider it necessary to participate interactively in the practical work, the ovaries of the practical examination of anatomy and solving the subjects in the final examination.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	60 %
- Responses to the laboratory examination	20 %
- Periodic checks with written exams	-
- Continuous testing throught the semester	20 %
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-

Description of the actual methods of examination – E

- The exam consists of the oral presentation of the 4 subjects extracted by the student from the 4 categories (1 category of subjects anatomical bases of medical practiceand3categories neuroanatomy subjects).
- All subjects are brought to the attention of students at the beginning of the semester.
- The exam is held in groups, time is given to students and is transparent. At examination participatesminim3students, the head of discipline, the head of the partical works and the university assistant who guided the group in the respective semestre. Medicine has always been a profession that requires communication with patients and communication between doctors, we consider that oral examination allows us to evaluate basic anatomical knowledge and induces the student the need for establishing anatomical-clinical correlations.

Minimal requirements for grade 5	**Requirements for grade 10**
• The presence of the student at least 70% practical work with the restoration of all absences. • Making the reports related to the practical work and the knowledge of the basics of the practical work. • Obtaining the average 5 in the practical anatomy exam..	• Average over 9 on the practical anatomy exam. • Average over 9 on the 4 exam subjects extracted.

• Average response (note 7) to the subject in the category of the basics of the anatomy of medical practice and minimum responses (note 5) to at least 2 out of 3subjects of the 3 categories of neuroanatomy subjects.	

Date of completion

25.09.2018

Discipline Coordinator,

Tudorache Ioan Sorin, M.D., Ph.D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Tudorache Ioan Sorin, M.D., Ph.D., Lecturer

Laboratory Coordinator,

Vasilică Cristescu, M.D., Ph. D., Assoc. Professor
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Tudorache Ioan Sorin, M.D., Ph.D., Lecturer
Köver Zoltan Janos, M.D., Ph.D., Univ. Assistant
Coroescu Mirela, M.D., Ph.D., Univ. Assistant

Department approval date

30.09.2018

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**PHYSIOLOGY (II)**					
Didactic position, name and surname for the Coordinator of the Discipline	**Ciurea Jean, M.D., Ph. D., Assoc. Professor**					
Didactic position, name and surname for the Coordinator of the Course	**Ciurea Jean, M.D., Ph. D., Assoc. Professor**					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Ciurea Jean, M.D., Ph. D., Assoc. Professor** **Cojocaru Manole, M.D., Ph.D., Assoc. Professor** **Nemeș Roxana, M.D., Ph.D., Assoc. Professor** **Petrescu Daniel, M.D., Ph. D. Student** **Munteanu Ioana, M.D., Ph.D.**					
Discipline Code	**MLE.2.4.9**	Formative category of the discipline		**FS**		
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)		**E4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits		**4**

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**100**	Total hours of individual study	**44**

Distribution of time pool per week	**Hours**
1. Study of the course material	5
2. Study according with the course support, manuals	3
3. Study of the minimal bibliography	5
4. Additional documentation in the library	5

5. Specific activity for the seminary or laboratory	5
6. Homeworks, translations, etc.	5
7. Prepairing for different witten exams	0
8. Prepairing for oral examinations	2
9. Prepairing for the final examination	5
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	5
13. Tutoring	2
14. Examinations	2
15. Other activities:	0

Course name	**PHYSIOLOGY (II)**
Specific professional competencies	• Starting from the recapitulation of the general notions of anatomy necessary to understand the way in which the function of an organ / apparatus / system is carried out, a topic is approached which by specific, specialized terms and notions is useful both for the study of disciplines from other academic years and for subsequent medical practice. • In the presentation of the way one organ works, the constant aim is to emphasize that the normal functioning of the organism is that of a “unitary whole”, in which the mode of activity of one organ influences the performance of the others; • Facilitates the understanding of the scientific methodology for measuring biological functions through laboratory analyzes and paraclinical investigations; • In relation to the normal biological values allows the appreciation / evaluation of the degree of general disorder of the organism functions;
Transversal competencies	• The discipline "lays" the foundation for the subsequent understanding of: the etiology and general pathogenesis of diseases, their evolution, the way of adaptation and reactivity of the body to risk factors, favors and determinants of various diseases. • To achieve this goal, the discipline adopted the latest learning techniques: the interactive nature of classes and practical works, modern methods of acquiring knowledge, such as: grid tests, learning algorithms, schemes and designed figures, etc. • Professionalism is based on a permanent, up-to-date information but also on the knowledge of the basic elements and notions, which will serve to understand the notions taught in the disciplines of the following years of study.
General objectives of the discipline	• Understanding and mastering by the student the functioning at optimal levels of an organ, conditionality that generates the normo-functionality of the whole organism. After promoting the discipline, the student has the minimum knowledge necessary to acquire the general etiopathogenic mechanisms taught by diseases, which will be the subject of study in clinical disciplines.

	• At the end of the study period of the discipline the student knows the methodology through which the functionality of an organ and of the whole organism can be evaluated; Specifically, he knows the main laboratory / paraclinical investigations and their normal values, useful data in assessing the state of health or disease, as well as recovery from an applied therapeutic guide.
Specific objectives of the discipline	1. Training students to become competitive and through knowledge of physiology, as a basic foundation of knowledge in the medical field; 2. The curriculum of the discipline to offer a permanent topical training, in dynamics. In this sense, 2 sessions of 2 hours / semester each, among the course ones, have topics established by mutual agreement with the students; as a rule, they are the penultimate and last of the semester in progress; 3. The discipline will continue to cooperate with other departments regarding the topics of the courses, in order to eliminate the parallelism of the topic and to develop at the level of 4. Department enthusiasm to "work in a team"; 5. The discipline to be recognized for the quality and originality of the training and teaching programs, in order to motivate and attract the student. 6. Discipline to allow the future doctor, based on the knowledge gained, to react in a timely manner, in case of illness, by: • juxtaposing the state of suffering of the organism and making the optimal decision in carrying out a triage of the severity of the patients, prioritizing the emergencies; The act is of major importance in promptly providing, by the doctor, the medical service that is required to be performed and cannot be evaluated to juxta-importance, except by knowing how the body functions in full health.

Course Syllabus	**Hours**
Course no. 1. Physiology of the digestive system. The main functions of the digestive tract: motor, digestive, secretory, absorption and endocrine; General notions regarding the mechanisms of regulation of the digestive tract functions: the role of “extrinsic” SNV, of the intramural plexuses and of the diffuse endocrine system of the digestive tract (APUD system), the motor function of the smooth muscles; the lying reflex;	2
Course no. 2. Motor function of the digestive tract. Motor function of the food tract: chewing and swallowing: mechanisms, stages, regulation; the function of storage, mixing and evacuation of the stomach; motor dysfunctions in the floor upper food tract; biliary tract motility; motility of the small intestine; motility of the large intestine; general and local mechanisms of neuro-humoral regulation; defining the notion of intestinal and / or biliary motor dysfunction.	2
Course no. 3. Secretory function of the stomach and pancreas (part I). a. Gastric secretion: production and composition mechanisms; roles; adjustment b. Exocrine secretion of the pancreas: production mechanisms, composition; roles; regulation; the mechanisms of “autolytic defense” (clinical significance).	2
Course no. 4. Secretory function of the digestive tract. (part II).	2

Course Syllabus	Hours
a. General notions of functional anatomy of the bile ducts b. Bile secretion: production mechanisms, composition; hepatic bile / vesicular bile (comparison); the role and significance of the main components; bile acids. (importance of bile acid / cholesterol / lecithin ratio); bile pigments (synthesis and their normal distribution in the blood, stool, urine); regulation (choleretic and anti-choleretic factors). Summary notions on jaundice.	
Course no. 5. Secretory function of the digestive tract. (part III). a. Secretion of the small intestine mucosa: secretory mechanisms, intestinal juice composition; roles in digestion; the advantages of coupling the last phase of digestion with the beginning of absorption; regulation b. Secretion in the large intestine: secretory mechanisms, composition; roles; balanced saprophytic flora (biocenesis); Mechanisms of secretion regulation.	2
Course no. 6. Digestive function of the digestive tract. Optimal conditions of activity for digestive enzymes; to different segments of the digestive tract. The enzymes involved, roles developed. The substrates on which it develops its action.	2
Course no. 7. Absorption function of the digestive tract. Small intestine as a preferred site; morpho-functional specializations for good absorption. Peculiarities of absorption in the colon. General mechanisms of trans-epithelial transport used in the absorption of final digestion products: absorption of monosaccharides; absorption of amino acids; absorption of fatty acids; absorption of vitamins; absorption of water and electrolytes. Brief notions about malabsorption.	2
Course no. 8. Physiology of the excretory system (part I). a. Recapitulation of the general notions of functional anatomy of the nephron, with emphasis on the structure of the nephron and the juxtaglomerular apparatus. Kidney functions. b. Kidney excretion function. The final product of kidney excretion: urine (physical properties, chemical composition). Mechanisms of urine formation. Primary urine formation: ultrafiltration and its regulation mechanisms. The principle of clearances.	2
Course no. 9. Physiology of the excretory system (part II): a. Physiology of the urinary tract. The role of renal tubular processes in the formation of definitive urine. Reabsorption of water, major electrolytes, urea, glucose and proteins / amino acids. Secretion in the nephron tubes. Diuresis. b. Tubulo-glomerular feedback. c. Saving mechanisms at this level. d. Renal purification mechanisms / Excretion of nitrogenous catabolites.	2
Course no. 10. Physiology of the excretory system. (Part III): a. Urine dilution and concentration mechanism / Countercurrent multiplier mechanism. b. Regulation of renal function. c. Urination. d. Other renal functions: Endocrine function of the kidney. Involvement of the kidney in maintaining acid-base balance, isolation and isohydria. Participation of the kidney in the regulation of phospho-calcium balance.	2
Course no. 11. Pancreas. a. The endocrine pancreas. Functional organization of the Langerhans Islands. Insulin: synthesis, secretion, circulating forms; interaction with receptors; physiological role; regulation; insulin deficiency and excess; clinical significance; Glucagon: synthesis, secretion, circulating forms; interaction with receptors; physiological role; secretion regulation. The contribution of the Romanian school in the discovery of insulin. Integrative conclusions regarding glycemic homeostasis-interaction of various nerve-hormonal links. Other pancreatic hormones (somatostatin, pancreatic polypeptide, etc.).	2

Course Syllabus	Hours
b. Endocrine regulation of phospho-calcium balance: Definition of balance. Their components: intake, circulating forms, storage (functional structure of the bone), excretion; The role of PTH: synthesis, secretion, circulating forms; interaction with receptors; physiological role, regulation. The role of calcitonin: synthesis, secretion, circulating forms; interaction with receptors, physiological role, regulation. Vitamin metabolism: the role of hormone 1, 24 dihydroxycholecalciferol. c. Epiphysis: indole and peptide hormones: synthesis, secretion, circulating forms; interaction with receptors; physiological role; adjustment. The role of endocrine "clock". Romanian achievements in pinealogy.	
Course no. 12. Hormones a. Male sex hormones. the reproductive function of the male. b. Female sex hormones. Physiology of women outside pregnancy.	2
Course no. 13. The visual analyzer	2
Course no. 14. Acoustic-vestibular analyzer	2

Laboratory Syllabus		Hours
Investigation of the digestive system (6 practical work sessions)	**Practical work I:** Exploration of the secretory function of the stomach. A. Summary notions regarding: the main types of cells involved in gastric secretion (with emphasis on acid secretion), the mechanisms involved in gastric acid secretion (the role of parietal cell mass, vagus, histamine, gastrin). Methods of harvesting gastric juice. Normal parameters of gastric secretion and acidity (basal secretory volume, basal acid flow, nocturnal acid secretion). B. Defining the parameter: stimulated secretory volume (maxi-shore); The main tests to stimulate gastric acid secretion with insulin (Holander), with pentagastrin with histamine (histologist), of the vague drug block. The usefulness of these tests in everyday medical practice. Specification of the terms: normo-acidity, hyperacidity, hypoacidity and anacidity. C. Highlighting gastric digestion products (enzymatic action on proteins); Chlorhydropeptic activity of gastric juice; The action of the labferment on milk proteins. D. Interpretation of analysis bulletins.	3
	Practical work no. II: a. Microscopic examination of gastric secretion. b. Generalities regarding the research of acute hemorrhages in faeces. The principle of determining the techniques (Weber, Adler, Castle-Meyer), the significance of testing positivity, false positive results. The rigors of the diet in such determinations. c. Endosopia, as a technique for paraclinical exploration of the digestive tract. d. Esophageal pH, the principle of determination, values, utility in medical practice.	3
	Practical work no. III: Exploring the secretion of the exocrine pancreas. a. Direct exploration methods: duodeno-pancreatic tubing (normal parameters of spontaneous and stimulated secretion: secretory flow,	3

Laboratory Syllabus		Hours
	concentration in hydrocarbons, global enzymatic activity). General information on exocrine pancreas stimulation techniques. b. Dosage of pancreatic enzymes in the blood and urine (with emphasis on amylasemia and amylazuria). Normal values, clinical utility of the determinations. c. Indirect methods for exploring the secretion of the e-xocrin pancreas. Chemical dosing of steatorrhea, starch and fat tolerance test, I131-labeled fatty substance test (triolein and oleic acid test). The usefulness of this test and the steatorrhea dosage and in exploring the development of the intestinal absorption of lipids.	
	Practical work no. IV: Exploring the main liver functions (I): a) Evaluation by laboratory examinations of the role of the liver in protein metabolism: serum electrophoresis, plasma fibrinogen, Koller test (with vitamin K) will insist on the clinical significance of the test. b) Exploring the functional participation of the liver in lipid metabolism: dosing of total cholesterol, free and esterified: HDL - cholesterol, LDL - circulating cholesterol. c) Serum immunoelectrophoresis - general notions, normal values, clinical utility. d) The topographic situation of various enzymes at the level of hepatocyte structural components. Laboratory investigations investigating hepatocyte integrity: TGOS, TGPS, LDH, G-GTP dosing, serum alkaline phosphatase, 5-nucleotidase, sideremia. Normal values.	3
	Practical work no. V: Exploration of major liver function (II): a) Exploration of bile secretion by the Meltzer-Lyon duodenal tubing technique (technical description, specification of bile types and macroscopic appearance: enumeration of the main parameters to be investigated in bile). b) Summary notions about the physiology of bile salts, bile pigments, stercobilinogen and urobilinogen. Dosage of bile pigments in the blood: normal values. Definition of jaundice and condition of occurrence. Dosage of stercobilinogen in faeces (normal values, clinical significance). Recognition reactions of bile pigments: Gmelin, Rosenbach, methylene blue. Qualitative dosing of bile salts in urine (general notions, clinical significance of these dosages). c) Hepato-splenic scintigram - Summary notions. d) General abdominal ultrasound, as a paraclinical examination to investigate the abdomen.	3
	Practical work no. VI: A. Exploring the functions of digestion and intestinal absorption 1. Exploring lipid digestion and absorption: Test with marked fats: triolein and oleic acid; 2. Exploring the digestion of carbohydrate absorption: Disaccharide test; D-xylose test; 3. The Schilling test.	3

Laboratory Syllabus		Hours
	B. Fecal examination (coprological examination) - basic test of exploration of digestive functions, as a whole. a. macroscopic examination; b. microscopic examination; c. Determination of the pH of faeces with sunflower. Significance of pH variations: acid value = fermentation process; alkaline value = putrefaction process; d. the main chemical parameters that are investigated in the fecal matters (enumeration, clinical significance); C. Vitamin K test (Koller test). Seminar on practical topics and the course: one hour; Restoration of practical works.	
	Practical work no. VII: Seminar on practical topics and the course: one hour; Restoration of practical works.	3
II. Investigation of the renal excretory apparatus (3 practical work sessions)	**Practical work no. VIII:** Exploration of renal function- Part I: Determination of the level of humoral constants, in which participation kidney is mandatory (nitrogen retention products): a.Summary summary of the urinal formation process. b.Definition of notions of diuresis and needles of: normouria, polyuria, oliguria, anuria. Clinical utility of diuresis assessment. c. The physical properties of the urine. d. Composition (enumeration of constituents) of normal urine. Comparison between the composition of plasma, which is the basis of the formation of urine and the content of normal urine (from the point of view of chemical constituents.	3
	Practical work No. IX: Exploration of renal function- Part II: A. The notion of renal clearance (definition, calculation formula and correlation with parameters: renal plasma flow and renal filter); The usefulness of reducing clearance values in differentiating acute glomerulopathies, vasculopathy or chronic glomerulopathies. b. Normal blood and urine values of protein catabolism products: urea, creatinine and uric acid. The usefulness of determining the plasma's total non-protein nitrogen. c. Research of glucose and its correlation with blood glucose levels. Criteria for differentiation of: diabetes mellitus and kidney disease. Definition of insipid diabetes. d. Dosage of proteinuria; physiological and pathological proteinuria. e. Exploitation of the ability to dilute and concentrate the urine by volhardsample. Clinical significance of density determination in spontaneously emitted urine and in samples collected during Volhard sampling.	3
	Practical work No. X I. Exploration of renal function- Part III: a. Complete urinal examination: parameters that provide information about physical properties and chemical composition. Definition of:	3

Laboratory Syllabus		Hours
	hypostenuria, hyperstenuria, isostenuria. Listing the constituents of normal urine (without normal values). Comparison (from the point of view of chemical constituents) between the composition of plasma, which is the basis of the formation of urine and the content of normal urine b. Urinary sediment research (organized and unorganized). II. Functional exploration of the adrenal corticosteroid: Summary of the anatomical structure and physiology of the adrenal corticosteroid. Classification of laboratory methods that functionally explore the gland: indirect and dynamic tests (challenge/stimulation). Listing indirect explorations that provide information about gland function. It will be emphasized on : dosing of free cortisolemia, 17-total urinary cetosteroids and 17 -hydroxy-urinary steroids. III.. Functional exploration of the medulloadrenal 1. Indirect exploration by blood pressure tracking, Holter type. 2. Direct basal tests: dosing of the metabolite: urinary vanilmandelic acid. Preparation for sample collection, normal values. Utility in medical practice.	
	Practical work No. XI: I. Investigation of neuro-muscle activityre: A. Normal electromyogram B. Exploring phosphocal balance with a role in neuromuscular excitability a) clinical signs revealing the existence of neuromuscular hyperexcitability: Chwostek, Weiss, Trousseau; b) reobase and cronaxia - parameters of neuro-muscular excitability; c) Definition of muscle, tetanus and spasmophilia. Electromyogram in the diagnosis of tetanus and spasmophilia. C. Dependence of skeletal muscle labor on the pregnancy to which it is subjected. Fatigue curve. II. Functional exploration of the thyroid gland: Recap: Circulating forms of active thyroid hormones and their adjustment by the anterior pituitary. General notions about the main morphogenetic and metabolic functions of thyroid hormones. Direct basal methods of determining thyroid function: blood dosing of T3 , T4 and TSH. Iodocapture. Ultrasound and scintigram. Exploration of the peripheral effects of thyroid hormones - achilean reflexogram.	3
	Practical work No. XII: Functional exploration of the nervous system a) Electroencephalogram: summary notions of electrogenesis, eeg rhythms, characteristics of normal adult wake paths; types and peculiarities of normal adult sleep paths. b) General notions about the properties and composition of normal cerebrospinal fluid: Samplingmethods. Macroscopic exam. Chemical composition. Cytological examination.	3
	Practical work No. XII: Restoration of practical work	3
	Practical work No. XIV. Colloquium in the theme of practical work*	3

Laboratory Syllabus		Hours
	Note: The colloquium on how to learn the topic taught during the practical work sessions will be supported with the teacher who taught, in the last session of L.p., the discipline Physiology. Failure to promote the colloquium entails the impossibility of presenting the examination in the subject taught in the course of the discipline.	

Minimal References:
1. GUYTON TRATAT de FIZIOLOGIE a OMULUI. Editura: Medicala CALLISTO Anul publicarii: 2020
2. Stevanovic, Nikola. (2019). Guyton and Hall Textbook of Medical Physiology - 12th-Ed.
3. Fiziologie Medicala - Walter Boron, Emile Boulpaep, Leon Zagrean, 2017 Editura: Hipocrate Editia: a III-a ISBN: 9789738837232
4. Course support taught

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- The provision of medical services by the future doctor requires the mandatory knowledge of knowledge on the normal functioning of the body, with the inter-conditionality of the activity of devices and systems. The appreciation of the return to the status of a biological normal functioning of a patient, implies the relation to the previous normal. Even if only from this, the acquisition of the notions of physiology is imposed as a quasi-permanent necessity, in order to have comparison criteria regarding the Normal. Achieving this biological state in the dynamics of a disease, identified by the Functional Normal allows to obtain a double goal: - proving a thorough knowledge of the fundamentals of medical practice; - to avoid a hasty evaluation of the evolution as “good”, but which can become a malpractice.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• Interactive learning; multimedia projection of course support
Laboratory	• Interactive discussions • Interpretation of analysisbulletins

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
- to know the basic concepts justifying: the usefulness in medical practice of a laboratory or paraclinical investigation carried out on a patient; - be aware of the principle of determination, normal values and the generic name of deviations less and plusrespectively; - it is not permissible to support the L.P. colloquium without recovering the topic taught at the laboratory meetings, at which the student was absent; recovery is mandatory, regardless of whether the absence is reasoned or not; - be able to interpret the result from a laboratory/paraclinical analysis bulletin in general;

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	60%
- Responses to the laboratory examination	20%

- Periodic checks with written exams	10%
- Continuous testing throught the semester	10%
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	
Description of the actual methods of examination – E - Descriptive test, 3 hours, with 2 subjects and a quiz test, 40 questions.	
Minimal requirements for grade 5	**Requirements for grade 10**
• Minimum 50% correct answers	• Minimum 90% correct answers

Date of completion

25.09.2018

Discipline Coordinator,

Ciurea Jean, M.D., Ph. D., Assoc. Professor

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Ciurea Jean, M.D., Ph. D., Assoc. Professor

Laboratory Coordinator,

Ciurea Jean, M.D., Ph. D., Assoc. Professor
Cojocaru Manole, M.D., Ph.D., Assoc. Professor
Nemeș Roxana, M.D., Ph.D., Assoc. Professor
Petrescu Daniel, M.D., Ph. D. Student
Munteanu Ioana, M.D., Ph.D.

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**HISTOLOGY (II)**					
Didactic position, name and surname for the Coordinator of the Discipline	**Albulescu Radu, M.D., Ph.D., Assoc. Professor**					
Didactic position, name and surname for the Coordinator of the Course	**Albulescu Radu, M.D., Ph.D., Assoc. Professor**					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Albulescu Radu, M.D., Ph.D., Assoc. Professor** **Anghelescu Iuliana, M.D., Ph.D., Univ. Assistant**					
Discipline Code	**MLE.2.4.10**	Formative category of the discipline			**FS**	
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)		**E4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits		**4**

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**100**	Total hours of individual study	**44**

Distribution of time pool per week	**Hours**
1. Study of the course material	4
2. Study according with the course support, manuals	4
3. Study of the minimal bibliography	4
4. Additional documentation in the library	4

5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	4
7. Prepairing for different witten exams	2
8. Prepairing for oral examinations	4
9. Prepairing for the final examination	2
10. Consultations	2
11. In the field documentation	4
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	4
14. Examinations	2
15. Other activities:	0

Course name	**LIBER**
Specific professional competencies	• Knowledge of the principles and methods of histological examination. • Knowledge of the general architecture of the fundamental classes of tissues (epithelial, connective, muscular, nervous). • Knowledge of the main subclasses of tissues, especially the morphological and functional characteristics and the relationships between the various cellular components and elements of the extracellular matrix. • Differential diagnosis of tissue / organ by examination of histological preparations.
Transversal competencies	• Teamwork skills, oral and written communication skills, use of information and communication technology, respect for professional ethics, etc. • Description and understanding of human body architecture at the level of component tissues.
General objectives of the discipline	• Knowledge of the interdependencies between the various histological components of the human body.
Specific objectives of the discipline	• Learning techniques for recognizing different tissues and organs. • Learning the methods used to differentiate them from similar structures. • Learning the methods used in differentiating normal structures from structures / tissues, pathological organs. • Establishing structure-function inter-relationships.

Course Syllabus	**Hours**
1. The Vascular system	2
2. Endocrine glands	2
3. Lymphoid organs	2
4. The oral cavity	2
5. Digestive tract	2
6. Annex glands	2
7. Respiratory system	2
8. Verification (partial examination)	2
9. The male genital tract	2
10. The female genital area_I	2

Course Syllabus	Hours
11. Female genital tract_II	2
12. Urinary tract	2
13. Sense organs	2
14. Recapitulation Sem II	2

Laboratory Syllabus	Hours
1. Vascular system	2
2. Lymphoid organs	2
3. Endocrine glands	2
4. Oral cavity	2
5. Digestive tube	2
6. Annex glands	2
7. Respiratory apparatus	2
8. Skin and its appendages	2
9. Male genitalia	2
10. Female genital apparatus	2
11. Urinary apparatus	2
12. Sense organs	2
13. Communications session	2
14. Practical examination	2

Minimal References:

1. Course Support
2. Atlas Histology General. Cretsoiu Dragoș, Sanda Maria Crețoiu. Carol Davila University Publishing House, 2017
3. Borda A. et al.: Histology Tissues, University Press Publishing House, 2010
4. Mescher AL. Junqueira Histology. Treaty and Atlas., Ed. Medical Callisto, 2017,
5. Molecular Biology of the Cell –6th Edition – Bruce Alberts, Garland Science – Taylor and Francis Group, 2014
6. Histology: A Text and Atlas, with correlated cell and molecular biology - Michael Ross and Wojcech Pawlina, Ed. Lippincott Williams & Wilkins, 2015
7. Junqueira's Basic Histology, 14ed, Text and Atlas, Anthony L. Mescher, McGraw-Hill Education, 2016
8. Oral Anatomy, Histology and Embryology, 5th Edition - Barry K.B Berkovitz, G. R. Holland & Bernard J. Moxham, Elsevier Science Publishers, 2017
9. Histology and Cell Biology: Examination and Board Review – Douglas F. Paulsen – McGraw-Hill, 2010

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:

- Acquiring the basic notions of cytology and histology of tissues and organs as a basis for further understanding of their physiology and pathology. Learning notions related to histological technique and microscopic study of tissues and organs. Acquiring the ability to recognize a tissue or organ and a histological coloration, to perform a differential diagnosis between different tissues and organs.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	- Exposure using the projector - Interactive discussions with students
Laboratory	- Exposure, practical activity using specific materials (biological samples, reagents, fixed histological preparations) and specific examination techniques (optical microscopy) as well as access to special methods (cell and tissue cutls) - Individual or group work of students according to the work of practice

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
- Theoretical knowledge of tissue architecture (epithelial, connective, muscular, nervous), with microscopic and electronic microscopic ultrastructural aspects - Knowledge of histological organization and functions of the main tissue structures (e.g. skin, cardiovascular system, digestive, respiratory, etc.). - Practical skills for making, examining and describing observations on specific preparations.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	40%
- Responses to the laboratory examination	20%
- Periodic checks with written exams	20%
- Continuous testing throught the semester	10%
- Projects / Translations / Posters / Essays, etc.	10%
- Other activities:	0%

Description of the actual methods of examination, E/V.

- Written test with 10 descriptive subjects.

Minimal requirements for grade 5	**Requirements for grade 10**
• Minimum 60% correct exam + colloquium answers	• Preparation and support of a theme/reference paper, etc. • Minimum 95% cumulative correct answers to exam + control works + continuous testing

Date of completion

25.09.2018

Discipline Coordinator,

Albulescu Radu, M.D., Ph.D., Assoc. Professor

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Albulescu Radu, M.D., Ph.D., Assoc. Professor

Laboratory Coordinator,

Albulescu Radu, M.D., Ph.D., Assoc. Professor

	Anghelescu Iuliana, M.D., Ph.D., Univ. Assistant

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**BACTERIOLOGY (II)**					
Didactic position, name and surname for the Coordinator of the Discipline	**Mitache Mihaela Magdalena, M.D., Ph.D., Lecturer**					
Didactic position, name and surname for the Coordinator of the Course	**Mitache Mihaela Magdalena, M.D., Ph.D., Lecturer**					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Mitache Mihaela Magdalena, M.D., Ph.D., Lecturer** **Epuran Silviu, M.D., Ph. D. Student, Univ. Assist.**					
Discipline Code	**MLE.2.4.11**	Formative category of the discipline			**FS**	
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)		**E4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits		**3**

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**150**	Total hours of individual study	**44**

Distribution of time pool per week	**Hours**
1. Study of the course material	6
2. Study according with the course support, manuals	8
3. Study of the minimal bibliography	4
4. Additional documentation in the library	2

5. Specific activity for the seminary or laboratory	3
6. Homeworks, translations, etc.	0
7. Prepairing for different witten exams	8
8. Prepairing for oral examinations	0
9. Prepairing for the final examination	7
10. Consultations	2
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	0
14. Examinations	2
15. Other activities:	0

Course name	**BACTERIOLOGY (II)**
Specific professional competencies	• Proper knowledge and use of discipline-specific concepts; • Knowledge of the morphological, physiological and biochemical characteristics of bacteria; • Knowledge of the concepts of bacterial genetics; • Knowledge of the relationships of microorganisms with the human host; • Knowledge of the concepts of immunology.
Transversal competencies	• Applying strategies of perseverance, rigor, efficiency and responsibility in work, punctuality and taking responsibility for the results of personal activity, creativity, common sense, analytical and critical thinking, problem solving, etc., based on the principles, norms and values of the code of ethics professional. • Applying interrelationship techniques within a team; amplifying and refining the empathic capacities of interpersonal communication and assuming specific attributions in carrying out the group activity in order to deal / resolve individual / group conflicts, as well as the optimal management of time
General objectives of the discipline	• Students acquisition of the main notions of microorganisms and their role in interrelationship with the human host.
Specific objectives of the discipline	• Knowledge of the main types of bacteria involved in human pathology, appropriating their physiological peculiarities. • Knowledge of the relationships between bacteria and the human body, the mode of action of antibacterial substances and antibiotic resistance.

Course Syllabus	**Hours**
1. Genus *Staphylococcus*. Morphological characters. Culture characters. Biochemical properties. The action of physical and chemical agents. Antigenic structure. Toxins and enzymes. Beech printing. Pathology. Epidemiology. Prophylaxis. Staphylococcus coagulazo – negative.	2
2. Genus *Streptococcus*. Morphological characters. Culture characters. Biochemical and metabolism characters. The action of physical and chemical agents. Classification of streptococcus. Virulence factors. Pathology. Immunologist. Prophylaxis. *Streptococcus pneumoniae.* Genus *Enterococcus.*.	2

Course Syllabus	Hours
3. Genus *Neisseria*. Morphological characters. Culture characters. Biochemical and metabolism characters. *Neisseria meningitidis*. Antigenic structure. The action of physical and chemical agents. Pathology. Immunity. Treatment.. Epidemiology. Prophylaxis. *Neisseria gonorrhoeae*. Differential characters. Antigenic structure. The action of physical and chemical agents. Pathology. Immunitayou. Epidemiology and prophylaxis..	2
4. *Enterobacteriaceae* family. Genus *Escherichia.*. *E. coli.* Genus *Klebsiella..* Morphological characters. Culture characters. Biochemical characters. Action of physical and chemical agents Antigenic structure. Pathology. Genus *Enterobacter.* Genus *Hafnia.* The *Serratia*genus. Genul *Proteus.*. Genus *Providencia.* Genus *Morganella.* Biochemical characters. Antigenic structure. Toxins and enzymes.	2
5. Genus *Salmonella*. Genus *Shigella.* Genus *Yersinia.*. *Yersinia pestis. Yersinia enterocolitis*. *Yersinia pseudotuberculosis. Francisella tularensis*. Genus *Pasteurella. Pasteurella multicida*.	2
6. Genus *Corynebacterium*. *Corynebacterium diphtheriae*. The Listeria *Listeria*genre. *Listeria monocytogenes*, morphological characters, culture characters, biochemical characters, implications in human pathology, epidemiology, laboratory diagnosis, prophylaxis.	2
7. Genus *Bacillus*. *Bacillus anthracis*, morphological characters, culture characters. Other species of the genus *Bacillus*, genuseralities. Genus *Clostridium.*. *Clostridium botulinum. Clostridium tetani.* Toxins. Pathology. Prophylaxis. Clostridia that cause invasive diseases. Toxins and enzymes. Pathology. Prophylaxis. *Clostridium difficile..*	2
8. The genera *Haemophilus, Bordetella* and *Brucella.*. *Haemophilus influenzae*. Characters, patogeny. Epidemiology and prophylaxis. *Haemophilus ducreyi.*. *Haemophilus aegyptius*. *Haemophilus aprophilus*. *Haemophilus parainfluenzae.* Genus *Bordetella.*. *Bordetella pertussis*. *Bordetella parapertussis*, *Bordetella bronchiseptica*. Genus *Brucella.*.	2
9. Genus *Pseudomonas*. *Pseudomonas aeruginosa*. The *Vibrionaceae*family. Genus *Vibrio.*. *Vibrio cholerae.* Genus *Aeromonas.* Genus *Plesiomonas.*. The *campylobacter genus.*. *C. jejuni and C. coli*. Genus *Helicobacter.*. *Helicobacter pylori.* Morphological characters. Culture characters. Biochemical characters. Pathology. Epidemiology.	2
10. Genus *Legionella*. Genus *Bartonella.* Unsporulated anaerobic bacteria: Gram negative bacteria. Genus *Bacteroides.* Genus *Fusobacterium.*.	2
11. *Spirochetaceae* family. Genus *Treponema.*. *Treponema pallidum.* Genus *Leptospira.* Genus *Borrelia. Borrelia recurrentis*. *Borrelia burgdorferi.* General characters.	2
12. Genus *Mycobacterium*. *Mycobacterium tuberculosis*. Other mycobacteria: photochromogenic mycobacteria; micscotochromogenic bacteria; necromogene mycobacteria; mfast-growing icobacteria. Pathogeny of illnesses with atypical mycobacteria. *Mycobacterium leprosy.*.	2
13. Genus *Rickettsia*. Genus *Chlamydia.*. The mycoplasma genus in pregnant women and newborns. Infections in immunodeficiencies. Epidemiology. Prophylaxis.	2
14. Fungi of medical importance. Etiological agents of localized and systemic infections (genus *Candida*, *Cryptococcus*, *Aspergillus*). Morphological characters, culture characters, action of physical and chemical factors, antigenic structure, pathogenicity, types of infections, treatment, prophylaxis.	2

Laboratory Syllabus	Hours
1. Laboratory diagnosis in infections produced by staphylococci.	2
2. Laboratory diagnosis instreptococci products.	2

Laboratory Syllabus	Hours
3. Laboratory diagnosis in infections produced by *Streptococcus pneumoniae*, *Enterococcus*.	2
4. Laboratory diagnosis in infections produced by Gram negative aerobic shells (*N. meningitidis*, *N. gonorrhoeae*).	2
5. Laboratory iagnostic in infections produced by *E. coli*. Laboratory diagnosis in infections produced by *Klebsiella* and *Proteus*. Laboratory diagnosis in infections produced by *Yersinia* and *Pasteurella*.	2
6. Laboratory diagnosis in infections produced by *Salmonella* and *Shigella*.	2
7. Laboratory diagnosis in infections produced by *Haemophilus, Bordetella*, *Brucella*.	2
8. Laboratory iagnostic in infections produced by bacteria of the genus *Pseudomonas*, *Acinetobacter*. Laboratory diagnosis in infections produced by *Vibrio cholerae*, *Aeromonas*.	2
9. Laboratory diagnosis in infections produced by *Campylobacter* and *Helicobacter*.	2
10. Laboratory diagnosis in infections produced by Gram positive anaerobic bacilli of the genus *Clostridium*.	2
11. Laboratory diagnosis in infections produced by *Treponema*, *Leptospira* and *Borrelia*.	2
12. Laboratory diagnosis in infections produced by bacteria of the genus *Mycobacterium*.	2
13. Laboratory diagnosis in infections produced by *Rickettsia*, *Chlamydia* and Mycoplasma. Laboratory diagnosis in infections producedby *Candida*.	2
14. Practical examination	2

Minimal References:
1. Course support (electronic).
2. Olga Mihaela Dorobăț – Medical Bacteriology – Ed. "Titu Maiorescu" University, Bucharest 2006
3. Buiuc D., Negut M., Treatise on Clinical Microbiology, Medical Ed., 2009.
4. Carmen Chifiriuc. Microbiology and medical virology, Ed. Univ. Bucharest, 2011
5. Methods and standards for microbiological control laboratories", Carmen Chifiriuc, Veronica Lazar, Carmen Curutiu, Mihaela Magdalena Mitache, Florina Marinescu, Cristina Croitoru, Luminita Dascalu, ,Ed. University of Bucharest, 2015
6. Manual of Applied Mycology, Irina Gheorghe, Lia Mara Ditu, Mihaela Magdalena Mitache, Ionela Avram, ISBN Univ. Titu Maiorescu: 978-606-767-065-3, ISBN Hamangiu: 978-606-27-1307-2, 2019

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- The concepts taught to students in courses and practical works are correlated with the scientific information of bibliography regularly updated by the use of specialized publications and multimedia/web sources, corresponding to the expectations of representatives of the epistemic community, professional associations and representative employers in the field of Health.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	Exposure of the material according to the analytical program. Interactive scheduled education; multimedia projection of course support
Laboratory	Exposure, conversation, didactic demonstration, problematization.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
- Being present to all practical works; - Redoing all of the absences; - Performing the experiments – blade examinations and biochemical reactions.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	60%
- Responses to the laboratory examination	20%
- Periodic checks with written exams	20%
- Continuous testing throught the semester	-
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-

Description of the actual methods of examination – E

- Written paper (descriptive and grid test).

Minimal requirements for grade 5	**Requirements for grade 10**
• promotion of the practical exam. • the appropriation of specialized terminology and its appropriate use by correct response to at least 50%+1 of each synthesis topic. • Correct answers to at least 50% of grid questions	• correct, complete and reasoned answer to all the problems posed by the topics. • Correct answers to all grid questions

Date of completion

25.09.2018

Discipline Coordinator,

Mitache Mihaela Magdalena, M.D., Ph.D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Mitache Mihaela Magdalena, M.D., Ph.D., Lecturer

Laboratory Coordinator,

Mitache Mihaela Magdalena, M.D., Ph.D., Lecturer
Epuran Silviu, M.D., Ph. D. Student, Univ. Assist.

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**VIROLOGY AND PARASITOLOGY (II)**					
Didactic position, name and surname for the Coordinator of the Discipline	**Mitache Magdalena, M.D., Ph. D., Lecturer**					
Didactic position, name and surname for the Coordinator of the Course	**Mitache Magdalena, M.D., Ph. D., Lecturer**					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Mitache Magdalena, M.D., Ph. D., Lecturer**					
Discipline Code	**MLE.2.4.12**	Formative category of the discipline		**FS**		
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)		**E4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits		**2**

No. of Hours per week	**2**	Out of which are Course hours:	**1**	Seminar / Practical Activity / Clinical Stage	**1**
Total of hours in the curriculum	**28**	Out of which are Course hours:	**14**	Seminar / Practical Activity / Clinical Stage	**14**
		Total hours per semester	**50**	Total hours of individual study	**22**

Distribution of time pool per week	**Hours**
1. Study of the course material	6
2. Study according with the course support, manuals	4
3. Study of the minimal bibliography	4
4. Additional documentation in the library	2

5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	0
7. Prepairing for different witten exams	0
8. Prepairing for oral examinations	0
9. Prepairing for the final examination	0
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	0
14. Examinations	2
15. Other activities:	0

Course name	**VIROLOGY AND PARASITOLOGY (II)**
Specific professional competencies	• Knowledgeș and understanding of discipline-specific concepts. • Familiarity of the student with the main general notions of parasite and parasitism, the intererelations of the host-parasite, pathogenicity, immune response.
Transversal competencies	• Applying strategies of perseverance,rigour, efficiency and responsibility in the work, punctuality and accountability for the results of personal activities, creativity, good sense, analytical and critical thinking, problem solving, etc., based on the principles, norms and values of the code of professional ethics and professional ethics. • 2. To apply interrelationship techniques within a team; to amplify and hone the capacity of interpersonal communication and to take on specific group activities in order order to deal with/resolving/ treating/ individual group conflicts, as well as to manage time optimally.
General objectives of the discipline	• Presentation of some basics related to the main parasitic infections.
Specific objectives of the discipline	• Knowledge of the notions of parasite and parasitism, host parasite interrelationship, pathogenicity, immune response. • Knowledge of the main general and species of parasites involved in human pathology. • Presentation of some essential elements for recognizing parasitic infections.

Course Syllabus	**Hours**
1. Parasites and parasitism	2
2. Genus Entamoeba	2
3. Genus Trichomonas	2
4. Genus Leishmania	2
5. Opportunistic parasitic death-producing infections	2
6. AIDS (cryptosporidiosis, pneumocystosis, toxoplasmosis), Plasmodium genus	2
7. Cestoidea class. Trematoda class. Nematoda class	2

Laboratory Syllabus		Hours
1.	Rageing of biological material, parasitological coproculture.	2
2.	L.C. R. examination, isolation and cultivation of pathogenic amoebes, diagnosis of trichomonosic infection.	2
3.	Diagnosis in cryptosporidiosis, pneumocystosis and toxoplasmosis.	2
4.	Diagnosis in malaria.	2
5.	Microscopic examinations for the recognition of parasitic elements (protozoa) used in the current diagnosis.	2
6.	It's coproparasitological exam and other special techniques in diagnosing helminthic infections.	2
7.	Microscopic and macroscopic examinations for the recognition of parasitic elements.	2

Minimal References:	
1.	Infecţii parazitare umane. Dan Steriu Ed. Briliant 1999,
2.	Parazitologie medicală. Simona Rădulescu Ed. ALL 1997
3.	Course support taught.

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- It involves integration into a responsible professional environment, the development of applied research programs, being in line with the requirements of European university education by constantly updating information, meeting the expectations of representatives of the epistemic community, professional associations and employers representing Health.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	- Exposure of the material according to the analytical program. Interactive scheduled education; multimedia projection of course support
Laboratory	- Exposure, conversation, didactic demonstration

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
1. The student's presence at all practical work. 2. Recovery of absences (maximum three) by presence at the recovery work and by submitting reports. 3. Knowledge of the main general and species of parasites involved in human pathology.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	60%
- Responses to the laboratory examination	15%
- Periodic checks with written exams	15%
- Continuous testing throught the semester	10%
- Projects / Translations / Posters / Essays, etc.	0%
- Other activities:	0%

Description of the actual methods of examination – E - Written paper (2 descriptive topics and a 10 question quiz test)	
Minimal requirements for grade 5	**Requirements for grade 10**
• promotion of the practical exam. • the appropriation of specialized terminology and its appropriate use by correct response to at least 50%+1 of each synthesis topic. • correct answers to at least 50% of grid questions	• correct, complete and reasoned answer to all the problems posed by the topics. • correct answers to all grid questions

Date of completion

25.09.2018

Discipline Coordinator,

Mitache Magdalena, M.D., Ph. D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Mitache Magdalena, M.D., Ph. D., Lecturer

Laboratory Coordinator,

Mitache Magdalena, M.D., Ph. D., Lecturer

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**IMMUNOLOGY**				
Didactic position, name and surname for the Coordinator of the Discipline	**Comănici Mihaela Maria, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Course	**Comănici Mihaela Maria, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Comănici Mihaela Maria, M.D., Ph.D., Lecturer**				
Discipline Code	**MLE.2.4.13**	Formative category of the discipline		**DS**	
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)	**E4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)		**M**	No. of credits	**3**	

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**75**	Total hours of individual study	**19**

Distribution of time pool per week	**Hours**
1. Study of the course material	2
2. Study according with the course support, manuals	2
3. Study of the minimal bibliography	2
4. Additional documentation in the library	2

5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	1
7. Prepairing for different witten exams	1
8. Prepairing for oral examinations	1
9. Prepairing for the final examination	1
10. Consultations	1
11. In the field documentation	1
12. Documentation from web sources, portals, wiki websites	1
13. Tutoring	1
14. Examinations	1
15. Other activities:	1

Course name	**IMMUNOLOGY**
Specific professional competencies	The development of fundamental concepts of immunology and immunological investigation methodologies useful in the current immunodiagnostic activity and in the immunological clinical research activity.
Transversal competencies	Facilitating the learning process by training new theoretical and practical skills (learning using learning plans), continuous evaluation of the learning process, effective use of previously acquired knowledge and practical skills and theoretical and practical understanding of new acquired concepts. Efficient use of information resources, carrying out research projects, preparing articles, scientific studies. Developing oral and written communication skills and teamwork.
General objectives of the discipline	The objective of the immunology course is to familiarize students with notions of natural and acquired immunity, notions of cellular and humoral mechanisms of immunological processes, as well as the mechanisms underlying the reactions between antigens and the effectors of immunity and their application sphere. The objective of the practical immunology work is to familiarize students with the main tests for evaluation of humoral and cellular immune response, the conduct of the immunological examination and working techniques frequently used in the immunology laboratory.
Specific objectives of the discipline	I.The immunology course allows students to assimilate: - of the main notions of natural and acquired immunity. - notions of antigens and factors that determine antigenity - knowledge of cellular and humoral effectors of immunity - notions of the mechanisms underlying the reactions between antigens and the effectors of immunity - notions of regulating humoral immune responses - notions of regulating cellular immune responses (cell immune response dynamics) - mechanisms of cellular and molecular cooperation Ⅱ. Practical immunology work allows: - appropriation of the principles of sampling, transport and reception of samples collected for analysis in the immunology laboratory - training of the ability to carry out and interpret different

	immunological diagnosis - knowledge of the laboratory techniques necessary for the diagnosis of infectious diseases, allergies and immunopathies

Course Syllabus	**Hours**
1. Objective and content of immunology. Organization of the immune system; Functions of the immune system. Lymphoid organs	2
2. Antigen (definition, characteristics, antigenic determinants, types of antigens, classification criteria). Major histocompatibility complex (MHC) – histocompatibility antigens (structure and functions)	2
3. Immune response, stages of immune response. Nonspecific immune response to infection: innate immunity and inflammatory response (acute inflammation, chronic inflammation, acute phase response - acute phase proteins)	2
4. Humoral mediators of nonspecific immune response. Complement system	2
5. Cytokines (interleukins, interferons, tumor necrosis factor, cell growth factors). Chemokine	2
6. Cellular effectors of non-specific immunity Granulocyte series cells	2
7. Mastocytes. APC-presenting antigen cells (macrophages, dendritic cells) NK and K cells	2
8. Humoral mediators of the specific immune response. Antibodies and theirsynonyms: gammaglobulins, immunoglobulins. Pathological immunoglobulin molecules	2
9. Genetic control of the synthesis of anmnoglobulins. Molecular basis of antigen-antibody interaction	2
10. Cellular effectors of specific immunity. Lymphocytic populations and their surface markers (Lymphocytes B and T). Activation of B and T lymphocytes	2
11. The B lymphocyte antigen receptor (BCR); T lymphocyte antigen receptor (TCR). Mechanism of antigen recognition by T lymphocytes; the role of MHC molecules in the presentation of antigens.	2
12. Antiviral, antibacterial, antiparasitic,antifungal immunity	2
13. Hypersensitivity reactions (type I, type II, type III and type IV hypersensitivity)	2
14. Hyposensitivity reactions (immunodepressions, immunological paralysis)	2

Laboratory Syllabus	**Hours**
1. Equipment and materials necessary for carrying out practical immunology work. Sampling and processing of blood samples for immunological tests. Labour and environmental protection measures to be applied in the immunology laboratory.	2
2. Antigen reaction (Ag) – antibody (Ac). Characters of the epitop-paratop link. Immune complex (PowerPoint presentation)	2
3. Precipitation reactions (precipitation in the tube, precipitation in agar gel or agarosis). Mancini Simple Radial Immunodiffusion (IDSR)	2
4. Practical applications of IDSR (quantitative dosing of immunoglobulins Ig A, M, G;quantitative dosing of c3)	2
5. Agglutination reactions. Practical applications: latex-agglutination for rheumatoid factor determination, C-reactiveprotein, ASLO	2
6. Haemagglutination reactions (agglutination reaction in the ABO system)	2
7. Electrophoresis (serum protein electrophoresis in agarosis gel, immunoelectrophoresis, SDS-PAGE electrophoresis for proteins, Immunobloting- Western Blott)	2
8. Elisa immunoenzymatic analysis. Quantitative determination of interleukin 6 (IL-6) from biological samples (ser, plasma) using the ELISA method	2

Laboratory Syllabus	Hours
9. Quantitative determination of tumor necrosis factor α (TNF-α) from biological samples (ser, plasma) using the ELISA method	2
10. Immunofluorescence;; RIA technique	2
11. Flow cytometry (identification of cell populations based on antigenic markers)	2
12. Determination of intracellular cytokines in total blood culture by flow cytometry	2
13. Laboratory investigations of cellularly mediated immunity. Practical application - tests to assess the function of neutrophil	2
14. Enzymatic amplification reaction (PCR)	2

Minimal References:
1. Veronica Lazar, Carmen Chifiriuc,Ramona Cernat, Doina Bulai, DuncanStewart-Tull "Immunobiology", University of Bucharest PublishingHouse, 2012
2. Grigore Mihăescu, Carmen Chifiriuc, "Immunologology and Immunopathology", Medical PublishingHouse, 2015
3. Andrei Olinescu, Angela Dliganiuc"Practical Immunology in Clinic and Experiment", Romanian Medical Life Publishing House, Bucharest, 2001
4. Andrei Olinescu, Mircea Panait, "Introduction to Immunology", Medica PublishingHouse, 2004
5. Mihail Dragomirescu, Emilia Nicoara, Iosif Marincu, Andreea Drăgulescu: "The body's response to infection ", University Horizons Publishing House, Timisoara, 2001
6. Constantin Bâră : "Essential Immunology", Editua BIC ALL, Bucharest, 2002
7. Dorel L. Radu, Crina Stăvaru, Iuliana Caraş, Gina Manda, Monica Neagu, Eugen Radu, Cornel Ursaciuc, Laurentiu M.Popescu"Methods and techniques of humoral and cellular immunology", Carol Davila University Publishing House, Bucharest 2006
8. Roitt'S Essential Immunology 12th Edition
9. Course support taught

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
The acquisition of basic knowledge in Immunology will enable the acquisition of the necessary skills to carry out a practical activity in the clinical laboratory.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	- Exposure of the material (course lectures) according to the analytical program using PowerPoint presentations; discussions on the material taught
Laboratory	- Practical applications (execution of practical work and immunological diagnostic techniques using biological samples and work kits) - Theoretical applications using PowerPoint presentations, presentation of immunological analysis bulletins and interpretation of results

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
- attendance at practical work (80%)

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
- mandatory restoration of absences - appropriation of specialized terminology - appropriation of the principles underlying the working techniques commonly used in the immunology laboratory - correct use of laboratory equipment - carrying out analytical programmes corresponding to the training capacity of students - explaining practical and theoretical notions in the meaning of students and corroborating theoretical knowledge with practical notions - the way in which the topics are presented will be logically structured, starting from the current observations to the scientific explanation of the topics discussed - orientation of students towards logical thinking and developing their ability to understand the main notions of immunology

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	75%
- Responses to the laboratory examination	10%
- Periodic checks with written exams	10%
- Continuous testing throught the semester	-
- Projects / Translations / Posters / Essays, etc.	5%
- Other activities:	-

Description of the actual methods of examination – E

- Written test with 10 descriptive subjects.

Minimal requirements for grade 5	**Requirements for grade 10**
• Promoting the practical exam • Promotion of knowledge verification tests during the semester • Acquiring the term of specialized inology and it's use in context appropriately	• Manifestation of interest through appropriate attendance at courses and practical work of immunology. • Promotion of knowledge verification tests during the semester with maximum qualification • The student must acquire both the basics and aspects of the course with a medium or increased degree of difficulty.

Date of completion

25.09.2018

Discipline Coordinator,

Comănici Mihaela Maria, M.D., Ph.D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Comănici Mihaela Maria, M.D., Ph.D., Lecturer

Laboratory Coordinator,

Comănici Mihaela Maria, M.D., Ph.D., Lecturer

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**MEDICAL DEONTOLOGY. BIOETHICS**					
Didactic position, name and surname for the Coordinator of the Discipline	**Nemeș Roxana, M.D., Ph. D., Assist. Professor**					
Didactic position, name and surname for the Coordinator of the Course	**Nemeș Roxana, M.D., Ph. D., Assist. Professor**					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	-					
Discipline Code	**MLE.2.4.14**	Formative category of the discipline		**DS**		
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**V**)		**V4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**O**	No. of credits		**2**

No. of Hours per week	**1**	Out of which are Course hours:	**1**	Seminar / Practical Activity / Clinical Stage	**0**
Total of hours in the curriculum	**14**	Out of which are Course hours:	**14**	Seminar / Practical Activity / Clinical Stage	**0**
		Total hours per semester	**50**	Total hours of individual study	**36**

Distribution of time pool per week	**Hours**
1. Study of the course material	6
2. Study according with the course support, manuals	6
3. Study of the minimal bibliography	6
4. Additional documentation in the library	2

5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	2
7. Prepairing for different witten exams	2
8. Prepairing for oral examinations	2
9. Prepairing for the final examination	2
10. Consultations	2
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	0
14. Examinations	2
15. Other activities:	0

Course name	**MEDICAL DEONTOLOGY. BIOETHICS**
Specific professional competencies	• Proper identification of the moral principles and norms of medical activity. • Solving ethical dilemmas in medical practice • Identifying and establishing the types of assistant-patient relationship that can optimize medical care. • Identification of the ethical values of the individual and society and their interference. • Obtaining informed consent in the medical act and scientific research. Ethics of research on the human subject. • Patient law and doctor's obligation. • Confidentiality of the medical act. • Medical loyalty, non-discrimination. • Medical professionalism, professional independence • Ethics of the relationship between colleagues. • The principles of bioethics in medical research. • Right to reproduction, assisted reproduction, moral status of the embryo. • The problem of euthanasia, assisted suicide. • Palliative care, brain death.
Transversal competencies	• teamwork skills enter, inter and transdisciplinary • oral and written communication skills in the mother tongue/street • use of information and communication technology • respect for patient rights and optimal management of the patient-assistant relationship • professional decision-making • tolerance towards diversity and multiculturalism, • respect and development of professional values and ethics
General objectives of the discipline	• knowledge in the field of ethical relations in medical practice, • of the value of the nurse-patient and nurse-society relationship, • shaping the ethical mechanisms of professional decisions, • development of values underlying professional morality, autonomy and professional responsibility, social involvement and group interaction, personal and professional development
Specific objectives of the discipline	• Elaboration of informed consent, respect for patient rights, • promoting the values of benefit and non-evilness, • moral and ethical foundations of research on the human subject

	• Respect for professional and ethical norms, promotion of the humanism of the profession. • Identification of a medical ethical dilemma, the moral values that compose it and the ways of solving it

Course Syllabus		**Hours**
1.	Course 1. Bioethics and medical ethics. Definition. Historical aspects	1
2.	Course 2. Bioethical principles inmedical practiceă	1
3.	Course 3. Professional confidentiality and professional secrecy	1
4.	Course 4. Moral and legal values in the relationshiptakes nurse - patient	1
5.	Course 5. Informed consentntul informat	1
6.	Course 6. Medical research on the human subject	1
7.	Course 7. Ethical dilemmas	1
8.	Course 8. Benefficiency. Nonmalefficiency	1
9.	Course 9. Mechanism of profesional decision in medicine. Benefit-risk assessment	1
10.	Course 10. Normative documents of medical ethics: Hippocratic Oath, Geneva Declaration, Code of Conduct of the College of Physicians	1
11.	Course 11. Regulatory Documents of Medical Ethics Helsinki Declaration, Belmont Report	1
12.	Course 12. Organ transplantation	1
13.	Course 13. Conceive. Sterilization. Abortion	1
14.	Course 14. Euthanasiatake. Assisted suicide. Paliatia	1

Minimal References:
1. CG CURCA. Elements of medical ethics. Rules of ethics in medical practice: about the principles of biotics. Ed. House of Science Book Cluj, 2012. ISBN: 606-17-0297-8
2. Mircea Gelu Buta, Liliana Buta. Bioethics in pediatrics. Ed Eikon. 2008
3. Mihaela Leaf. Ethical and bioethics expertise. Ed LIMES. 2010
4. Course support in electronic format

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- All the topics taught in the course areexposed in the courses, inwhich the latest data are taken in the national and international literature. Corroborating the content of the discipline in accordance with the requirements of European university education in order to meet the expectations of representatives of professional associations and employers in the field of health.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	- One-hour course without pause assisted by videopswarming on screen (presentations in Power Point system); - Drawings on flipchart and magneticboard.
Laboratory	- Evaluation test

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:	
For admission to the final evaluation:: - Present - 80% of the courses taught	

Consideration points for computing the final score:	Share of the final score (in %) (Total = 100%)
- Responses to the final exam	80 %
- Responses to the laboratory examination	-
- Periodic checks with written exams	20 %
- Continuous testing through the semester	-
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-

Description of the actual methods of examination – V

- Written with 3 editorial topicsfrom the topic of the coursestaught. The durationof the examine is 2 hours.
- At least one subject covered for note 5.
- All topics dealt with correctly and completely for note 10.

Date of completion

25.09.2018

Discipline Coordinator,	**Head of the Department**,
Nemeș Roxana, M.D., Ph. D., Assist. Professor	Nemeș Roxana, Assoc. Professor, M.D., Ph. D.
Course Coordinator,	**Laboratory Coordinator**,
Nemeș Roxana, M.D., Ph. D., Assist. Professor	-

Department approval date

30.09.2018

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**MEDICAL SPECIALIZED COMMUNICATION IN MODERN FOREIGN LANGUAGES (II)**				
Didactic position, name and surname for the Coordinator of the Discipline	**Mirela Radu, Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Course	**Mirela Radu, Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Mirela Radu, Ph.D., Lecturer**				
Discipline Code	**MLE.2.4.15**	Formative category of the discipline		**CS**	
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)	**V4**
Discipline Regime (**M-m**andatory, **Op-op**tional, **F-f**acultative)		**O**		No. of credits	**2**

No. of Hours per week	**1**	Out of which are Course hours:	**0**	Seminar / Practical Activity / Clinical Stage	**1**
Total of hours in the curriculum	**14**	Out of which are Course hours:	**0**	Seminar / Practical Activity / Clinical Stage	**14**
		Total hours per semester	**50**	Total hours of individual study	**36**

Distribution of time pool per week	**Hours**
1. Study of the course material	4
2. Study according with the course support, manuals	4
3. Study of the minimal bibliography	4

4. Additional documentation in the library	4
5. Specific activity for the seminary or laboratory	2
6. Homeworks, translations, etc.	2
7. Prepairing for different witten exams	2
8. Prepairing for oral examinations	2
9. Prepairing for the final examination	2
10. Consultations	2
11. In the field documentation	2
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	2
14. Examinations	2
15. Other activities:	-

Course name	**SPECIALTY COMMUNICATION IN ENGLISH**
Specific professional competencies	1. Knowledge and understanding (knowledge and appropriate use of discipline-specific notions): - As an important discipline in the curriculum, the aim is both to revise the linguistic and grammatical knowledge of the general English language, as well as to assimilate and fix the elements of specialized, medical language. The seminar aims, therefore, to review the grammatical and lexical structures commonly found in the medical language, through readings of texts, dialogues and applied exercises, interactive graduated by the level of difficulties, leading to good communication in the field. 2. Explanation and interpretation (explanation and interpretation of ideas, projects, processes, as well as theoretical and practical contents of the discipline): - Developing the ability to understand the written text (Reading): - read, translated, answered questions about the text; - identification of key terms/ elements of cohesion/ coherence in the text; - Development of hearing-based understanding capacity: - identification of correct pronunciation and intonation; identification of the register (formal/ informal); recognition of fundamental communication strategies (introductory and conclusive formulas); - Development of oral expression capacity (Speaking): identification and correct use of basic linguistic structures corresponding to different acts of language; correct use of notional and

	instrumental units; correct use of rules of pronunciation and intonation. Development of writing capacity: correct use of introductory elements; adaptation to the communication situation 3. Instrumental-applicative (design, management and evaluation of specific practical activities: use of methods, techniques and tools of investigation and application): - identification and use of communication strategies, methods and techniques in the medical process; 4. Atitudinal (manifestation of a positive and responsible attitude towards the scientific field / centered on democratic values and relations / promotion of a system of moral and civic cultural values / optimal and creative exploitation of one's own potential in scientific activities / involvement in institutional development and in promoting scientific innovations / engaging in partnership relations with other people - institutions with similar responsibilities / participation in their own professional development): - the manifestation of a positive and responsible attitude towards the scientific field; - promoting a system of cultural, moral and civic values; - optimal and creative exploitation of one's own potential in scientific activities; - involvement in institutional development and promotion of scientific innovations; - engaging in partnership relationships with other people - institutions with similar responsibilities;
Transversal competencies	Realistically solving - with both theoretical and practical argumentation - common professional situations, with a view to solving them effectively and ethically.
General objectives of the discipline	Familiarization of students with the notions and concepts characteristic of medical terminology; Training of theoretical and practical skills in the medical field.
Specific objectives of the discipline	- The work of the seminar is based on the reading of medical texts, followed by the conversation, problematization and appropriation of the notions of medicine through discovery. - All this is done by explanation, deductive methods, association, exemplification, presentation, role-playing games, repetitive practice, drills, schematic development, visualization techniques, frontal, individual activities.

Course Syllabus	**Hours**
-	-

Laboratory Syllabus		**Hours**
1.	Medical and paramedical personnel and places	1
2.	Symptoms and signs of ailments	1
3.	Investigations: basic investigations	1
4.	Investigations: laboratory tests	1

Laboratory Syllabus	Hours
5. Diseases treatment	1
6. Diseases prevention	1
7. Epidemiology	1
8. Medical ethics	1
9. Medical research	1
10. Taking a medical history	1
11. Taking a medical history	1
12. Physical/ mental examination	1
13. Explaining diagnosis/ giving bad news	1
14. Final revision	1

Minimal References:
1. Eric H. Glendinning; Ron Howard Professional English in use, Cambridge University Press 2007
2. Valerie C. Scanlon, Essentials of anatomy and physiology, 5th Edition, F.A. Davis Company, Philadelphia, 2007
3. Van De Graaff, Human Anatomy, 6th Edition,The McGraw−HillCompanies, 2001
4. John T. Hansen, Netter's Atlas of human physiology, 1st Edition, Icon Learning Systems, 2002
5. Sylvia S. Made, Understanding Human Anatomy & Physiology, 5th Edition, The McGraw−Hill Companies, 2004
6. Heather Bateman, Ruth Hillmore, Daisy Jackson, Dictionary of medical terms, 4th Edition, A & C Black, London, 2007
7. Nina Thierer, Deborah Nelson, Judy K. Ward, LaTanya Young, Medical Terminology
8. Language for Health Care, The McGraw-Hill Companies, Inc., 2010
9. www.britannica.com/science/human-body
10. Course support taught

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- The future practical activity of the doctor is based not only on theoretical and practical knowledge, but also on knowledge of English, patience and special conscientiousness, which is acquired through studies started in the preclinical discipline Specialized communication in English. - Our subject provides the doctor with the necessary basic knowledge related to the medical context.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	- Interactive scheduled education; multimedia projection of course support
Laboratory	- Practical demonstration of the clinical aspects of some diseases but also the specifics of important systems of the human body.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
- to know the basics of medical terminology in English; - have no more than 20 % unmotivated and unrecovered absences from practical work.

Consideration points for computing the final score:	Share of the final score (in %) (Total = 100%)
- Responses to the final exam	50%
- Responses to the laboratory examination	20%
- Periodic checks with written exams	20%
- Continuous testing throught the semester	10%
- Projects / Translations / Posters / Essays, etc.	0%
- Other activities:	0%

Description of the actual methods of examination – E

- written paper (descriptive and grid test)

Minimal requirements for grade 5	Requirements for grade 10
• promotion of the practical exam • promoting control work • recovery of absences from practical work • knowledge of the basics of the terminology taught	• in-depth knowledge of the notions taught

Date of completion

25.09.2018

Discipline Coordinator,

Mirela Radu, Ph.D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Mirela Radu, Ph.D., Lecturer

Laboratory Coordinator,

Mirela Radu, Ph.D., Lecturer

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**MEDICAL MANOEUVERS SKILLS (1ST MODULE)**					
Didactic position, name and surname for the Coordinator of the Discipline	**Copaci Iulian, M.D., Ph. D., Lecturer**					
Didactic position, name and surname for the Coordinator of the Course	**Copaci Iulian, M.D., Ph. D., Lecturer**					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Cristian Gabriel, M.D., Ph. D., Assoc. Professor** **Mușetescu Alina, M.D., Ph. D., Univ. Assistant** **Rădulescu Ionica, M.D., Ph. D., Univ. Assitant**					
Discipline Code	**MLE.2.4.16**	Formative category of the discipline			**SS**	
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)		**E4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits		**2**

No. of Hours per week	**4**	Out of which are Course hours:	**2**	Seminar / Practical Activity / Clinical Stage	**2**
Total of hours in the curriculum	**56**	Out of which are Course hours:	**28**	Seminar / Practical Activity / Clinical Stage	**28**
		Total hours per semester	**56**	Total hours of individual study	**-**
Distribution of time pool per week					**Hours**
1. Study of the course material					-
2. Study according with the course support, manuals					-

3. Study of the minimal bibliography	-
4. Additional documentation in the library	-
5. Specific activity for the seminary or laboratory	-
6. Homeworks, translations, etc.	-
7. Preparing for different written exams	-
8. Preparing for oral examinations	-
9. Preparing for the final examination	-
10. Consultations	-
11. In the field documentation	-
12. Documentation from web sources, portals, wiki websites	-
13. Tutoring	-
14. Examinations	-
15. Other activities:	-

Course name	**NOEUVERS SKILLS (1ST MODULE)**
Specific professional competencies	• Knowledge and understanding of discipline-specific notions • Familiarity with the terminology specific to ability in medical work
Transversal competencies	• Demonstrate concern for continuous professional improvement by training the specific thinking skills and practice of the discipline in order to adapt the professional components to the dynamics of the social context.
General objectives of the discipline	• Acquiring the skills of full examination of the patient and specifyingthe diag nostic according to the general clinical amenamenul .
Specific objectives of the discipline	At the level of application: • carry out the correct collection and estimation of anamnesis data; • be able to establish clinical-functional diagnosis for the initiation of the medical rehabilitation program; • to assess the functional balance, the degree of disability, the prognosis of medical and medical-social rehabilitation; • assess the effectiveness of the clinical and functional medical rehabilitation programme At the integration level: • possess skills for the implementation and integration of knowledge obtained to discipline skills in medical work; • be able to objectively assess and self-assess knowledge in the field; • be able to assimilate new achievements in the field of skills in medical work • and integrate them with other medical and paramedical disciplines.

Course Syllabus	**Hours**
1. Course 1. Clinical general examination. Anamnesis. Technique of presenting a clinical case	2
2. Course 2. Interpretation of laboratory data. Clinical significance.	2
3. Course 3. Modern imaging diagnostic methods. Limits and indications. Basic principles.	2
4. Course 4. Complete examination of the respiratory system. Respiratory-specific investigations.	2
5. Course 5. Ophthalmological examination. Relevant ophthalmological investigations.	2

Course Syllabus	Hours
6. **Course 6.** ENT examination. Clinical and paraclinical investigations important for rapid ENT assessment.	2
7. **Course 7.** Cardiological examination. Clinical and paraclinical investigations important for essential cardiological evaluation	2
8. **Course 8.** Peripheral vascular examination (arterial and venous system, lymphatic system). Clinical and paraclinical investigations relevant to the correct determination of a diagnosis of peripheral vascular pathology.	2
9. **Course 9.** Neurological examination of the central nervous system. Clinical and paraclinical investigations relevant to the correct determination of a diagnosis of central neurological pathology.	2
10. **Course 10.** Neurological examination of the peripheral nervous system. Clinical and paraclinical investigations relevant to the correct determination of a diagnosis of peripheral neurological pathology.	2
11. **Course 11.** Examination of the abdominal wall. Clinical and paraclinical diagnosis of abdominal parietal defects.	2
12. **Course 12.** Examination of abdominal viscera – the upper digestive tract of the duodeno-jejunal angle. Clinical and paraclinical diagnosis of the upper digestive tract pathology of the duodeno-jejunal angle	2
13. **Course 13.** Examination of abdominal viscera – distal digestive tract of the duodeno-jejunal angle. Clinical and paraclinical diagnosis of digestive tract pathology in the distal segment of the duodeno-jejunal angle.	2
14. **Course 14.** Examination of abdominal viscera – liver and pancreas. Clinical and paraclinical diagnosis of liver and pancreatic pathology.	2

Laboratory Syllabus	Hours
1. The technique of correct examination of the patient on devices and systems.	2
2. The technique of making spirometry. Proper analysis and interpretation of a spirometry	2
3. Technique of correct completion of the eye butt exam. Paraclinical investigation of the anterior ocular pole.	2
4. The technique of otoscopy and determinations of auditory samples. Interpretation of normal and pathological audiogram. Diapason technique.	2
5. Technique of complete clinical examination of the heart. Interpretation of EKG.	2
6. Technique of performing oscillometer. Interpretation of a cardiac Doppler ultrasound.	2
7. Technique of performing an ultrasound Doppler arterial axis and peripheral venous.	2
8. Central neurological examination technique. The correct realization and interpretation of an EGA.	2
9. Central neurological examination technique. Performing and correctly interpreting an electromyography and determining the rate of transmission of peripheral nervous impulse.	2
10. Technique of transparietal abdominal ultrasound. Identification of abdominal parietal defects on ultrasound.	2
11. The technique of correct realization and interpretation of baritat transit.	2
12. The technique of correct realization and interpretation of a superior digestive endoscopic investigation.	2
13. The technique of correct realization and interpretation of an irrigation.	2
14. The technique of correct realization and interpretation of a lower digestive endoscopic investigation.	2

Commented [MC1]:

Commented [MC2]:

Minimal References:
1. Lynn S. Bickley, Bates Ghid de Examinare Clinica si Anamneza, Editura Medicala Callisto, 2012
2. Levine, A.I., DeMaria Jr., S., Schwartz, A.D., Sim, A.J. (Eds.). The Comprehensive Textbook of Healthcare Simulation. Springer-Verlag New York, 2013
3. F.D. Ungureanu, Tehnici curente în chirurgia clasică şi laparoscopică, Ed. Printech, vol. 1, 2005
4. F.D. Ungureanu, Tehnici curente în chirurgia clasică şi laparoscopică, Ed. Printech, vol. 2, 2005
5. Official course

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:

- All the topics taught in the course and practical internships are exhibited in the teaching and scientific materials of the discipline, monographs, guides,courses, in which are taken the latest data from the national and international literature, corresponding to the maximum share of the expectations of representatives of the epistemic community, professional associations and employers representatives inthe field of health in the country. Most of the topics on display are the correspondent of the scientific content requested by the bibliography of the national residency contest.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	• 2-hour course without pause assisted by on-screen video-poiect (presentations in Power Point system); Drawings on flipchart and magnetic board.
Laboratory	• Practice in the saloanes of the clinic of internal medicine examination methods, presentation of clinical cases with the emphasis of specific lesions and methods of treatment, the establishment of techniques of patient care and basic therapeutic notions and principles of medical procedures. Pplayback and it'sxplication of notions in the practical work guides.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:

For admission to the practical examination of traineeship:

- Full restoration of absences at clinical stage;
- The presence of the student at all seminars;
- Completion of the case book;
- Promotion to written evaluation tests during the semester.

Evaluation at the clinical stage**:**

- Orala orala a presentation of the clinical case selected from the case available in the Clinic of Internal Medicine;
- The correct performance of clinical manoeuvres entered in the technique of objective examination with references to the selected case;
- Knowledge of normal and patholgic values of biological constants;
- Correct interpretation of imaging;

For admission to the final evaluation:

- Attendance at 80% of the courses taught;

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
• Promotion of the oral practicalexamination; • Promotion of periodic tests during the semester; • Promotion of weekly seminars.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	50 %
- Responses to the laboratory examination	20 %
- Periodic checks with written exams	10 %
- Continuous testing throught the semester	10 %
- Projects / Translations / Posters / Essays, etc.	10 %
- Other activities:	-

Description of the actual methods of examination – E

- Written paper (descriptive test with 10 subjects).

Minimal requirements for grade 5	**Requirements for grade 10**
• Conducting periodic tests through control works with correct final answers, i.e. obtaining satisfactory scores during these tests during the semester • Correct completion of at least 1/2 of the subjects in the final exam	• Assimilation of skills in medical work; • Obtaining scores of more than 70% in intermediate tests • Active participation in the activity carried out in the course • Getting a score of more than 90% on the final exam

Date of completion

25.09.2018

Discipline Coordinator,

Copaci Iulian, M.D., Ph. D., Lecturer

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Copaci Iulian, M.D., Ph. D., Lecturer

Laboratory Coordinator,

Cristian Gabriel, M.D., Ph. D., Assoc. Professor
Mușetescu Alina, M.D., Ph. D., Univ. Assistant
Rădulescu Ionica, M.D., Ph. D., Univ. Assitant

Department approval date

30.09.2018

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**YEARLY MEDICAL PRACTICE FOR ACQUIRING MEDICAL SKILLS AND COMPETENCES**				
Didactic position, name and surname for the Coordinator of the Discipline	-				
Didactic position, name and surname for the Coordinator of the Course	**Tudorache Sorin, M.D., Ph.D., Lecturer** **Hârșovescu Tudor, M.D., Ph.D., Lecturer**				
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Tudorache Sorin, M.D., Ph.D., Lecturer** **Hârșovescu Tudor, M.D., Ph.D., Lecturer**				
Discipline Code	**MLE.2.4.17**	Formative category of the discipline		**SS**	
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)	**V4**
Discipline Regime (**M-m**andatory, **Op-op**tional, **F-f**acultative)		**O**	No. of credits		**2**

No. of Hours per week	**40**	Out of which are Course hours:	-	Seminar / Practical Activity / Clinical Stage	**40**
Total of hours in the curriculum	**160**	Out of which are Course hours:	-	Seminar / Practical Activity / Clinical Stage	**160**
		Total hours per semester	**160**	Total hours of individual study	-

Distribution of time pool per week	**Hours**
1. Study of the course material	0
2. Study according with the course support, manuals	0
3. Study of the minimal bibliography	0

4. Additional documentation in the library	0
5. Specific activity for the seminary or laboratory	0
6. Homeworks, translations, etc.	0
7. Prepairing for different witten exams	0
8. Prepairing for oral examinations	0
9. Prepairing for the final examination	0
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	10
13. Tutoring	0
14. Examinations	0
15. Other activities:	0

Course name	**YEARLY SPECIALITY PRACTICE FOR ASSIMILATION OF MEDICAL SKILLS AND ABILITIES**
Specific professional competencies	- Knowledge, understanding, explanation and interpretation of all theoretical knowledge obtained during the year - Practical application of health legislation in the field and consequences of non-compliance - Understanding the need for first aid measures, individual and collective activities.
Transversal competencies	- Development as future medical professionals with direct specification of the three-dimensional valences of their entity – doctor, family member and participant in social life
General objectives of the discipline	- Familiarization of students with daily practice, based on the theoretical knowledge obtained
Specific objectives of the discipline	- Understanding the importance of practical activity for your entire medical career.

Course Syllabus	**Hours**
Medical language – the correct/logical use of medical knowledge in the clinic (assisting the patient for his position at the edge of the bed and in his movement in the ward, the medical positioning of the patient at the bed level, normal and anthalgic body positions).	30
Administrative - the patient's circuit in the medical-health unit, the rights and obligations of the patient, obtaining informed consent, general notions about malpractice.	30
Approach and management of patients according to pathology. Common and specific paraclinical investigation methods, General technique of dressing, survey, diet, nutrition.	40
Supervision of patients and medical maneuvers - temperature, pulse, breathing, diuresis, stool, vomiting, sputum, anamnesis and types of pain. Non-invasive measurement of blood pressure, determination of capillary blood glucose, determination of capillary pulse, oxygenotherapy – nasal cannula, administration of medication. Clinical cases.	60

Minimal References:	
1.	Technique of patient care and first aid – Dr. Dan Monastereanu and Acad. Prof. Dr. Gheorghe Niculescu – Didactica and Pedagogical Publishing House -1994
2.	Practical course of medical-surgical emergencies - vol. I – Dr. Dan Monastereanu et al. Didactic and Pedagogical Publishing House – Bucharest 1995

Minimal References:	
3.	Practical course of medical-surgical emergencies - vol.II – Dr. Dan Monastereanu et al. Didactic and Pedagogical Publishing House – Bucharest 1996
4.	Practical course of medical-surgical emergencies - vol. III – Dr. Dan Monastereanu et al. Didactic and Pedagogical Publishing House – Bucharest 1997
5.	Practical course of medical-surgical emergencies - vol.IV – Dr. Dan Monastereanu et al. Didactic and Pedagogical Publishing House – Bucharest 1998
6.	Practical course of medical-surgical emergencies vol. V – Dr. Dan Monastereanu et al. Didactic and Pedagogical Publishing House – Bucharest 1999
7.	M.Ghinescu; Community Nursing -Principles of Integrated Practice Renaissance Publishing Bucharest 2009
8.	C.Moga, A.Marcu, d.G.Minca :Communication enters and inter-organizational Institute of Public Health 2004
9.	Law 46/2003 Patient Rights Act
10.	Rules of 12 December 2016 for the application of the Patient Rights Act No. 46/2003
11.	Law No.17/2001-Social assistance of elderly persons
12.	G.Goldis: Medical Ethics in Pediatric Practice Aeus Publishing House 2006
13.	Order No. 961/2016 for the approval of the Technical Rules on cleaning, disinfection and sterilisation in public and private health facilities
14.	ORDIN No. 1101/2016 of 30 September 2016 on the approval of the Rules for the Surveillance, Prevention and Limitation of Health Care-Associated Infections in Health Units Issuer: Ministry of Health Published In: Official Gazette No. 791 of 7 October 2016
15.	ORDIN no. 1.226 of 3 December 2012 for the approval of the Technical Rules on the management of waste from medical activitiesMS MonitorOfficial Gazette.855of18December 2
16.	Law 282/2005 on the organization of blood transfusion activity, donation of blood and blood components of human origin, as well as ensuring health quality and safety, with a view to their therapeutic use, republished 2014. Law No. 282/2005 republished 2014

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:
- The completion of the specialized practical training course allows the integration of the future doctor in a responsible professional environment, the skill of collaboration with specialists from various fields, the development of the capacity to provide clinical assistance in a variety of problems corresponding to the expectations of representatives of the epistemic community, professional associations and representative employers in the field of Health.

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Practice:	- The usual activity of the institution - Activity at the patients bed. - Presentation of methodological elements, group discussions, group exercise, case analysis, demonstrations, dose calculation, case presentations, documentary visits, practice book.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
- 10 cases with vital sign and anamnesis assessments - making and completing 5 observation sheets from admission to discharge. - 5 nutritional anamnesis and the achievement of at least 3 specific regimens. - assessment of 10 patients with various types of pain and their history and anamnesis. - Practice scale: Completion of the practice book, Practice Convention, Specialty Practice Assessment Sheet

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Responses to the final exam	60%
- Responses to the laboratory examination	-
- Periodic checks with written exams	40%
- Continuous testing throught the semester	-
- Projects / Translations / Posters / Essays, etc.	-
- Other activities:	-

Description of the actual methods of examination – E/V

- Written paper with 10 descriptive subjects

Minimal requirements for grade 5	**Requirements for grade 10**
• knowledge for 5 –50% of basic notions	• knowledge of all the notions acquired during the practice

Date of completion

25.09.2018

Discipline Coordinator,

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Tudorache Sorin, M.D., Ph.D., Lecturer
Hârșovescu Tudor, M.D., Ph.D., Lecturer

Laboratory Coordinator,

Tudorache Sorin, M.D., Ph.D., Lecturer
Hârșovescu Tudor, M.D., Ph.D., Lecturer

Department approval date

30.09.2018

TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF MEDICINE
MEDICINE IN ENGLISH
ACADEMIC YEAR: 2018-2019

DISCIPLINE FILE

Faculty	**MEDICINE**
Department	**PRECLINICAL SCIENCES**
Field of study	**HEALTHCARE**
Study cycle	**LICENSE**
Study program	**MEDICINE**

Discipline`s Name	**PHYSICAL EDUCATION**					
Didactic position, name and surname for the Coordinator of the Discipline	**Urichianu Adrian Ion, M.D., Ph.D., Assoc. Professor**					
Didactic position, name and surname for the Coordinator of the Course	-					
Didactic position, name and surname for the Coordinator of the Seminary / Laboratory / Clinical Stage	**Urichianu Adrian Ion, M.D., Ph.D., Assoc. Professor**					
Discipline Code	**MLE.2.4.19**	Formative category of the discipline			**CS**	
Year of Study	**II**	Semester	**4**	Type of the final evaluation (**E, V**)		**V4**
Discipline Regime (**M**-**m**andatory, **Op**-**op**tional, **F**-**f**acultative)			**M**	No. of credits		**1**

No. of Hours per week	**1**	Out of which are Course hours:	-	Seminar / Practical Activity / Clinical Stage	**1**
Total of hours in the curriculum	**14**	Out of which are Course hours:	-	Seminar / Practical Activity / Clinical Stage	**14**
		Total hours per semester	**25**	Total hours of individual study	**11**

Distribution of time pool per week	**Hours**
1. Study of the course material	0
2. Study according with the course support, manuals	0
3. Study of the minimal bibliography	0
4. Additional documentation in the library	0

5. Specific activity for the seminary or laboratory	3
6. Homeworks, translations, etc.	0
7. Prepairing for different witten exams	0
8. Prepairing for oral examinations	0
9. Prepairing for the final examination	2
10. Consultations	0
11. In the field documentation	0
12. Documentation from web sources, portals, wiki websites	2
13. Tutoring	2
14. Examinations	2
15. Other activities:	0

Course name	**PHYSICAL EDUCATION**
Specific professional competencies	- Modular design (Physical and sports education, Sport and motor performance, Kinetotherapy and special motor skills) and planning the basic contents of the field with interdisciplinary orientation - Organization of the integrated curriculum and training and learning environment with an interdisciplinary focus (Physical and Sports Education, Sport and Motor Performance, Kinetic Therapy and Special Motor skills) - Assessment of physical growth and development and quality of motor skills according to the specific requirements/objectives of physical and sports education, attitude towards independent exercise - Assessment of the level of training of practitioners of physical education and sports activities.
Transversal competencies	- Organisation of physical and sports education activities for persons of different ages and levels of training under qualified assistance conditions, in compliance with the rules of ethics and professional ethics - Efficient and effective performance of work tasks for the organisation and conduct of sports activities - Operating with digital programs, documenting and communicating in a language of international circulation.
General objectives of the discipline	- Optimization of motor capacity according to the requirements of the professional profile; - Knowledge of ways of preventing, correcting and recovering diseases and deficient attitudes encountered in the medical profession;
Specific objectives of the discipline	- The role of physical education in the daily program of the student, future doctor; - Training of the ability to exercise independently in your spare time; - The objectives listed can be achieved by using methods and means specific to physical education and sport. - Improving basic motor skills (strength, speed, stamina, skill).

Course Syllabus	**Hours**
-	-

Laboratory Syllabus		Hours
1.	Communication of control requirements and rules. Organization of the student collective by groups. Light runs alternated with mobility exercises.	2
2.	Circuit of general physical training (fixed scales, medicine balls, gymnastics benches, acrobatics). Endurance run: B = 5 minutes; F = 4 minutes	2
3.	General physical training circuit (pair exercises: free and with medicinal balls, acrobatics). Endurance run: B = 6 minutes; F = 5 minutes	2
4.	General physical training circuit conducted outdoors (stadium stairs, ropes, motor games). Endurance run: B = 7 minutes; F = 6 minutes	2
5.	Development of motor skills: resistance-speed: - exercises from the school of running, jumping, throwing; long-term running (amounting to 8 -10 min.); accelerated running (up to 50 m); long jump from the spot.	2
6.	Exercises and exercise structures for learning technical-tactical elements and procedures in sports games. Table tennis, bilateral game. Exercises of selective influence of the musculoskeletal system and general physical development: exercises of elasticity and joint and muscle mobility.	2
7.	Norms and control test	2

Minimal References:	
1.	CÎRSTEA, GH., (2003), Programming and planning in school physical and sports education, Universe Publishing House, Bucharest;
2.	CERGHIT, I., (1997), Educational Methods, Didactic and Pedagogical Publishing House, Bucharest.
3.	DRAGNEA, A., BOTA, A., (2010), Theory of Motor Activities, Didactic and Pedagogical Publishing House, Bucharest;
4.	Dragu M., - Motor Games, Publishing House of the University Foundation "Lower Danube" Galati, 2002.
5.	Dragu M., - Motion Games, Galati Academic Publishing House, 2006.
6.	Ionescu, A., Mazilu, V., (1971), Physical Exercise in Health Service, Stadion Publishing House, Bucharest;
7.	Merghes P,Teghiu A.; Medical gymnastics for the prevention and correction of physical deficiencies; . Ed Mirton 2006
8.	Urichianu,A.,I., Ulareanu M., Georgescu, C., Bodybuilding Exercises, Ed. Prouniversitaria, 2015.
9.	Urichianu, A., s.a. Theory and Methodology of Physical Education and Sport, Ed. Discobol, 2018

Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the Healthcare Industry:

- Through its contents, the discipline has a pronounced pragmatic character, contributing to the training of specialists in the field of specialization through the following: harmonious development of the organism; optimisation of health status; preventing the installation of global and segmental physical deficiencies, training and maintaining the correct attitudes of the body; stimulating students' interest in systematic and independent exercise individually and collectively on a daily or weekly basis; creating a habit of complying with sports hygiene and accident prevention rules; developing self-defense and self-exceeding capacity

Disemination of the information	
Type of activities	**Didactic Methods Employed**
Course	-

Disemination of the information	
Laboratory	Practical works with sports materials.

Minimal performance standards – the minimum level of activities that need to be fulfilled by the student during the practical works in order to be accepted to the final laboratory exam:
- 25 abdomens; 30 rear; bilateral sports game of your choice (football, volleyball, table tennis) - 2 reports made and supported during practical hours, admitted with a minimum grade of 5 (corresponding to the accepted rating)
Specific conditions for carrying out the theoretical and practical activities of the discipline:
- For the acquisition by the student of the minimum level of competences specific to the discipline we consider necessary interactive participation in the seminar.

Consideration points for computing the final score:	**Share of the final score (in %) (Total = 100%)**
- Verification of practical work, control samples.	70%
- Testing specific skills in a learned sports game	10%
- Testing continues throughout the semester	10%
- Other activities: participation in sports competitions.	10%
Description of the actual methods of examination – V - Physical examination according to the criteria	
Minimal requirements for grade 5	**Requirements for grade 10**
• Notation is done by ADMIS/RESPINS.	• Presence, involvement, double the minimum standard. - Notation is made by Accepted/Rejected.

Date of completion

25.09.2018

Discipline Coordinator,

Urichianu Adrian Ion, M.D., Ph.D., Assoc. Professor

Head of the Department,

Nemeș Roxana, Assoc. Professor, M.D., Ph. D.

Course Coordinator,

Urichianu Adrian Ion, M.D., Ph.D., Assoc. Professor

Laboratory Coordinator,

Urichianu Adrian Ion, M.D., Ph.D., Assoc. Professor

Department approval date

30.09.2018