#### I approve

The President of Scientific Council,

Rector N. Kh. Saribekyan

«01» September 2020

# THE UNIVERSITY OF TRADITIONAL MEDICINE THE SPECIFICATION OF CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM

SPECIALIZATION 091201.00.7 - "GENERAL MEDICINE"

QUALIFICATION DOCTOR

The Specification of the Professional Education Program /PEP/ is designed for applicants, students, academic staff, stakeholders and employers.

It provides a brief overview of the key features of the program, including the expected learning outcomes, detailed information on learning, teaching and evaluation methods, learning outcomes, and content of each module which expects a student and who can achieve it, if he/she fully takes the offered advantage from the educational opportunities.

### PROFESSIONAL EDUCATIONAL PROGRAM OF 091201.00.7 - "GENERAL MEDICINE" SPECIALIZATION

#### 1. General provisions

■ The name and the number of profession of the educational program; *091201.00.7* - "General Medicine"

National Qualifications Framework; Level 6, Level 7 of the National Qualifications

Framework

The period of mastering of PEP; 6 years

Number of credits; 360/three hundred sixty/

Awarded Qualifications;

Doctor

Higher education institution;
 The University of Traditional Medicine /UTM/

• The Faculty of Educational program implementer; *General Medicine* 

■ The form of learning program; *Current education* 

Educational activities are implemented in;
 State Language of RA

For foreign students in English

■ The educational program is licensed and accredited; *License- N 0002* 

Accreditation - N 127

#### 1.1. Introduction:

The educational program of the profession /the PEP/ 091201.00.7-"General Medicine" implemented by the UTM is a package of documents, which have been reviewed and developed by the Monitoring and Review Working Group of the PEP and approved by the University's Academic Council /Protocol No. 2 on 31.08.2020/ in accordance with the requirements of the labor market and the RA state educational norms, the educational standards of the NFQ, as well as the exemplary educational programs of similar foreign universities were taken into account.

The PEP regulates the objectives of the educational process, the expected results, the content and the terms and technologies of its implementation, quality assurance of graduates and includes the curriculum, working plans of classes, lectures, and subjects (modules) and other materials, as well as the calendar curriculum for conducting educational and production

practices and methodological materials ensuring the implementation of relevant educational technologies.

### 1.2. The normative documents for developing the PEP of 091201.00.7 "General Medicine" curriculum.

The normative legal basis for developing the PEP is:

- RA Law on Education,
- RA Law on Higher and Postgraduate Professional Education,
- Requirements for the Professional Education Quality Assurance (PEQA) education criterion,
- State educational standards of higher professional education of the RA.

#### 1.3. General description of the Professional Education Program.

#### 1.3.1. The Purpose of the Professional Education Program /Mission/.

The purpose of the PEP is;

to prepare knowledgeable, highly moral doctors who are aware of their role in the doctorpatient relationship in accordance with the requirements of the labor market in the field of
healthcare, medicine and medical education, who will have fundamental and systematic
modern in-depth professional knowledge, skills and abilities to carry out professional
activities in the field of medicine, to carry out research work, to teach in higher and
secondary professional educational institutions and to continue studying at the next
educational level.

### In order to achieve the above-mentioned goal of the PEP, the following tasks have been defined:

- to provide medical education that will develop the student's culture of thinking, deepen his/her awareness of the social significance of the future profession, create high motivation to engage in professional activities,
- 2. to carry out the teaching of basic scientific principles, which is necessary for medical professional activity,
- 3. to provide complete and up-to-date professional knowledge and to develop the abilities and skills of applying this knowledge for further professional activities,

- 4. to teach the basic modern methods, ways and means of receiving, storing, processing and managing information,
- 5. to instill a desire for self-development and improvement of one's own qualifications,
- 6. to form a stable motivation to engage in the intended professional activity,
- 7. to develop the ability to find organizational and managerial solutions in non-standard situations and the willingness to take responsibility for them,
- 8. to promote the application of scientific and technological achievements within professional activities and promote innovative activities in the field of healthcare,
- 9. to create fundamental and practical conditions for the training of specialists, based on international standards of medical education, domestic traditions.

#### 1.3.2 The structure and description of the PEP

The official duration of the PEP is 6 years, 302 weeks, including theoretical teaching, practical and laboratory classes, examinations, study and practice practices and holidays. The volume of the educational program is 60 credits per 1 academic year.

The student's educational load is 45 hours per week including classroom /30 hours/ and outsourced work /independent 15 hours/.

The program ends with passing final attestation exams. Final attestation is permitted for full-time students. In case of passing the attestation exams, the graduate is awarded doctor's qualification.

The PEP of UTM's 091201.00.7- "General Medicine" consists of the following modules and educational units:

- I. Educational unit of social-humanitarian courses 33 credits
- II. Educational unit of natural science and medical biology courses 99 credits
- III. Preventive medicine training course 25 credits
- IV. Educational unit of general and special professional courses 182 credits
- Educational practice 18 credits
- Final summary certification (3 credits), which is the final stage of the educational program, the purpose of which is to verify theoretical and practical professional knowledge, abilities and skills according to the final results of the educational program.

#### V. Additional Elective Courses

#### VI. Optional course

#### 1.3.3 The requirements for an applicant

- The applicant must have a state sample certificate, secondary, vocational or primary vocational education.
- The applicants are eligible to apply for two of the mentioned three competition exams "Biology", "Physics" and "Chemistry" and "Armenian Language" as a non-competition subject.
- Admission is made by the admission procedure of higher educational institutions of the Republic of Armenia approved by the Government of the Republic of Armenia.

## 2. The professional activity description of the graduate who completed the PEP of 091201.00.7- "General Medicine"

#### 2.1. The scope of the professional activity of a graduate who completed the PEP includes;

After graduating from the university, the graduate has the right to perform preventive and diagnostic activities only under the direct supervision of a qualified specialist.

The graduate can independently engage in educational and research activities in medical, fundamental and theoretical directions. The graduate does not have the right to carry out activities related to the independent management of the patient. In order to carry out independent therapeutic, preventive and diagnostic activities, a graduate with a doctor's qualification must study in a clinical residency/residency (post-graduate) educational program, receiving an appropriate qualification in a clinical specialty.

#### 2.2. The objects of professional activity of a graduate who completed the PEP are;

- natural persons /hereinafter patients/,
- population,
- the integrity of the resources and technologies needed to create conditions for the protection of citizens' health.

#### 2.3. The types of professional activity of a graduate who mastered PEP are;

- medical,
- organizational-management,
- research,

- educational.

#### 2.4. The issues of the graduate professional activity

The graduate who completed the PEP should address the following issues related to professional activity:

#### medical activity

- the prevention of diseases in the population through preventive and anti-epidemic activities,
- preventive medical examination of dispensary, dispensing control,
- analyzing the medical and statistical information on the health indicators of different age and sex groups of the population,
- diagnosis of diseases and pathological conditions,
- immediate diagnosis of the condition,
- pregnancy diagnosis,
- temporary disability and other types of medical examinations,
- display of first medical aid /medical and sanitary/ under ambulatory and stationary conditions,
- primary health care services in case of sudden acute diseases and conditions, which do not threaten the patient's life and do not require immediate medical attention,
- participation in situations requiring urgent medical intervention,
- medical assistance in emergency situations and participation in medical evacuation,
- participation in medical rehabilitation and resort treatment,
- to formulate motives for maintaining and strengthening the health of people and others within the population,
- to teach patients the basic hygienic activities of the health, which contribute to the prevention of diseases and health promotion.

#### organizational-management activities

- medical assistance to medical organizations and their structural subdivisions using basic principles of the organization,
- creation of working conditions for medical staff working activities and favorable conditions for patients to stay in medical organizations,
- medical documentation maintenance in medical institutions,
- organization of medical examination,

- participation in the assessment of the quality of medical care provided to patients,
- maintaining basic information security requirements,

#### • research activities

- analysis of scientific literature and official statistical review, presentation of statistical analysis results to the public,
- participation in the solution of scientific-research and scientific-practical issues in healthcare, according to diagnosis, treatment, medical rehabilitation and prevention.
- educational activity
- teaching in higher and secondary professional educational institutions.

# 3. The professional activity description of as a result of mastering 091201.00.7- "General Medicine" PEP

The results of the PEP's mastering are determined by the quality acquired by graduate, that is his/her ability to apply knowledge, capacities and personal qualities according to professional activity issues.

As a result of the PEP's mastering the graduate should acquire general, general professional and professional endpoints.

The graduate who has mastered the "General Medicine" PEP must have the following general end-results:

GE	General end-results
GE -1	Have abstract thinking, ability to combine and analyze the methods of humanities,
	natural sciences, medical-biological-clinical sciences during professional-social
	activities.
GE -2	Be able to act in non-standard situations, bear social and moral responsibility for
	decisions made.
GE -3	Be able to provide first aid and emergency protection methods.
GE -4	Will be able to show willingness to work in a team, tolerate social, ethnic, religious
	and cultural differences.

The graduate who has mastered the PEP must have the following general professional end-results:

GPE	General professional end-results
GPE -1	Based on the basic requirements of information security, be able to solve the main
	problems of professional activity, using information, bibliographic resources,
	medical-biological terminology, information and communication technologies.
GPE -2	Be able to communicate in native and foreign languages - orally and in writing
	while carrying out professional activities.
GPE -3	Will be able to apply moral-psychological, deontological principles, basics of legal
	knowledge in professional activities.
GPE -4	Be able to analyze the results of one's own activities in order to prevent
	professional mistakes.
GPE -5	Organizing work in medical institutions and keeping medical documents.
GPE -6	Be able to apply basic concepts and knowledge of physicochemical, mathematical
	and other natural sciences when solving professional problems.
GPE -7	When solving professional problems, during medical care, be able to use medicine,

	traditional medicine and other means of non-drug treatment and combine them.
GPE -8	When solving professional problems, be able to assess the morpho-functional states,
	physiological and pathological processes in the human body, taking into account
	their age characteristics.
GPE -9	Be able to use medical tools and equipment.

A graduate who has mastered PEP must have the following professional end-results: *Medical activities* 

PE	Professional end-results
PE -1	Be able to and be willing to implement a set of measures to maintain and strengthen
	health, including the development of a healthy lifestyle, prevention of disease and
	spread, early diagnosis, detection of causes and development of conditions, as well
	as the elimination of harmful environmental stimuli that affect the health of adults
	and adolescents.
PE -2	Be able to and be willing to conduct preventive medical examinations, dispensary
	and implementation of dispensary control.
PE -3	Be able to listen to and analyze patient complaints, medical history, results of
	examination, laboratory, instrumental, pathological-anatomical, traditional and
	other examinations to detect or rule out the disease.
PE -4	Be able to diagnose the main pathological conditions, symptoms and syndromes of
	patients in the relevant international statistical classification of diseases and health
	problems. Make a differential diagnosis.
PE -5	Be able to conduct a temporary disability examination, participate in medical,
	social, forensic and medical examinations, record the fact of biological death of a
	person.
PE -6	Be able to treat patients with various nosologies in an outpatient setting, integrating
	modern and traditional medicine treatment methods.
PE -7	Be able to provide medical care in case of sudden acute illnesses, acute conditions,
	exacerbation of chronic diseases, which are not life-threatening and do not require
	urgent medical attention.
PE -8	Be able to provide the required immediate medical intervention.
PE -9	Be able to provide emergency medical care and participate in medical evacuation.
PE -10	Be able to determine the use of natural remedies, drugs, non-drug therapy,
	traditional medicine and other methods of treatment for patients in need of medical
	rehabilitation and sanatorium treatment.
PE -11	Be able to teach the population the basic sanitary-hygienic measures of the nature
	of recovery, the skills of self-control of the basic physiological indicators, which
	contribute to the maintenance and strengthening of health, the prevention of
	diseases.

#### Scientific research activities

PE -12	Be able to analyze and present medical information to the public based on
	evidence-based medicine.
PE -13	Be able to participate in scientific-medical research, applying domestic and foreign experience related to the topic.
PE -14	Be able to participate in the introduction of new methods aimed at maintaining the
	health of the population.

# 4. The documents that adjust the content and organization of the educational process during the implementation of 091201.00.7- "General Medicine" PEP.

The PEP is a system of documents, which is updated taking into consideration health, science, culture, economic, technique, technological and social spheres.

The content of the Professional Education Program's documents representing the organization and implementation of the educational process;

- 4.1. The formed endpoints according to subjects
- 4.2. Curriculum
- 4.3. Annual calendar study schedule
- 4.4. Working plans of the subjects
- 4.5. Student-productive practice programs

During the implementation of the PEP the following types of educational and production practices are envisaged

Nurse's assistant	3 credits	90 hours	II year	4 <sup>th</sup> semester
Manipulation nurse's assistant	3 credits	90 hours	III year	6 <sup>th</sup> semester
■ Doctor's assistant /Therapy/	3 credits	90 hours	IV year	8 <sup>th</sup> semester
<ul><li>Doctor's assistant /Surgery /</li></ul>	3 credits	90 hours	IV year	8 <sup>th</sup> semester
<ul><li>Doctor's assistant /Obstetrics and Gynecology /</li></ul>	3 credits	90 hours	V year	10 <sup>th</sup> semester
■ Doctor's assistant /Ambulance/	3 credits	90 hours	V year	10 <sup>th</sup> semester
Total	18 credits	540 hours		

The educational-training practice is conducted in the appropriate clinics, in the form of duty or cycles, as well as in structural divisions of the university.

#### 4.6. The final state attestation.

This includes the preparation and submission of state exams.

#### Final state attestation exams

- 1. Internal diseases
- 2. Surgical diseases
- 3. Obstetrics and gynecology

#### 5. Learning and teaching approaches

Teaching and learning are conducted in group format, and the workshop, practical work and practice involve small groups of people. Teaching methods encourage a student-centered approach at all the stages of learning, encouraging the student's individual development, proportional growth of professional capacities, professional information acquisition on his/her autonomy as well as individual analytical skills and critical thinking. Learning and teaching approaches provide a gradual contribution to knowledge, according to the complexity, as well as the continued development of skills and capacities, according to the basic requirements of professional development.

The lecture includes lectures, workshops, practical /individual/ workshops, consulting and practical training.

Lectures- An opportunity to present a sequence of extended and consistent facts,

Seminars-Group and individual creativity, discussion and reflection, critical thinking development,

Practical exercises-An opportunity to analyze and discuss experiments and topics, documents and materials,

Supported individual-study, by the usage of current materials - support for individual research and development,

Individual consulting -Providing more advanced, profound analysis and support for self-study.

#### 6. The criteria and methods of assessing quality of appropriateness of the PEP

The evaluation methodology used within the scope of the "General Medicine" PEP is based on the objectivity and measurability of students' knowledge, skills and abilities with proving, guiding, and encouraging functions. The student's knowledge, abilities, capabilities, autonomy and activity are evaluated. The evaluation procedure considers the initial /initial/ state and final /output/ outcome for an objective view of student's professional growth.

The methods of assessment are:

- -written test, intermediate written and/or oral exam, independent projects, oral quizzes and interviews,
- mark and grade rating are used in the assessment (100 points) according to the components selected for each item's evaluation.

See the details of the assessment in the order of "The students' knowledge assessment at UTM".

The assessment of learners' mastering quality includes current control of progressive intermediate and state final attestation.

The means and technologies of evaluation systems are given in each subject's work plans in the form of tests and exams.

The basic resources of the assessment system include control questions, test questions, situational issues, essay topics and other control measures, which allow us to rate the shaped degree of capacity of the learner.

During the training, the following types of control are used;

- Oral question
- Written works.

Each of the types of progressive current control is distinguished according to the capacities' detection method;

- During a dialogue between a lecturer and a student,
- During the creation and verification of written materials.

The oral questioning allows to evaluate the student's horizons and knowledge, the ability to logically construct the answer, the possession of oral speech and other skills. Written answers allow the lecturer to save time, to check the assessment justification and to reduce the degree of subjective approach based on student's individual abilities.

Each type of control is carried out with the help of certain forms, which can be the same for some types of control, for example, oral and written exams, as well as specific. Accordingly, some forms of control may combine several of its types (e.g. the subject may include both verbal and written test). Control forms are essay, test, test work, inquiry, exam.

- Learners are allowed to final state attestation after a comprehensive study of the subject matter of the curriculum provided by the curriculum.
- Intermediate final exam of state attestation is carried out in stages and includes the following mandatory attestation exams:
- -checking the level of appropriateness of practical skills,
- checking the level of theoretical readiness through a test exam,
- oral exam of the skills assessment of solving specific professional issues.

Students who successfully pass the final examination are awarded a diploma of completion of the profession. Students who have received inadequate certification or have missed the program, receive a certificate with a sample defined by the university.

#### 7. The terms of implementation of the PEP

#### 7.1. Providing specialist training to the personnel

The implementation of the PEP in training of the specialist is ensured by the scientific-pedagogical staff, who, as a rule, have basic education that corresponds to the profile of the subject matter, that are systematically engaged in scientific and (or) scientific-methodological activities. The share of lecturers that have an academic title and /or a scientific degree is not less than 50% of the total number of lecturers providing the educational process with the curriculum.

The lecturers of professional educational program have basic education and/or scientific degree corresponding to the subject of the subject being taught.

At least 52 percent of lecturers that provide professional educational program training process have academic degrees or academic titles.

A highly-qualified specialist in the relevant professional area may be involved in overall management of professional theoretical and practical training content.

#### 7.2. Methodological and informational support of the learning process.

The PEP of the specialist training program provides with educational-methodological documents and materials designed for all the courses of the general educational program /GEP/ of training courses (modules).

Students' outsourcing activities provide methodological support and justification of the time required for their implementation.

Each student has access to the electronic library system which contains publications related to the main subjects studied.

#### 7.3. Material and technical support of the educational process.

UTM which implements specialist training of the PEP has a material and technical base, which provides implementation of all types, subject and interdisciplinary training, laboratory, practical and research activities for students which are designed according to the curriculum of the university and comply with current sanitary and fire regulations and norms.

The University has the following logistical support for the preparation of a specialist for the implementation of the PEP.

Electronic materials are used in the university and there are at least 30 computers connected to the Internet for the educational process. Students are provided with computer labs during their education.

# 8. The characteristics of the socio-cultural environment ensuring the development of university students' overall educational abilities.

The organization of educational work is reflected in the regulations and rules of the University, educational work plans of the University, annual work plans of chairs and professors.

Internal educational acts of educational work are commands, regulations, programs, instructions, service papers and other documents that regulate educational activities.

The plan of educational work includes traditional events, taking into consideration the age and psychological peculiarities of the students, youth policy priorities, the historic memorable dates of the country and the university, provides a variety of events aimed at students' civic and

patriotic, cultural-moral, professional-labor education, science orientation, scientific-methodological support, students' social protection, improving the material-technical base of educational work.

The Student Council also implements considerable work.

During the implementation of educational work, the university staff uses various workshops, individual work with students, activities of student scientific society, implementation of professional programs and projects, innovative activities, cooperation with social partners at urban, regional and interregional levels.

The university has extensive use of learning opportunities for educational purposes. Particularly, issues of moral, humanitarian and patriotic upbringing, as well as issues related to psychology, culturology, Armenian language and culture of speech are included in humanitarian subjects' working curricula. The curriculum contains a cultural component. During the study of the subjects of natural and clinical cycles, the achievements of domestic scientists are widely mentioned.

Physical education of the students is aimed at creating a healthy lifestyle, participation in various levels (regional or national) of sports competitions and more.

The University has a very effective organizational structure, which ensures the development of general cultural (social and personal) qualities of graduates. There is a considerable potential for the organization and improvement of educational work, the ability to search for new opportunities within the framework of the structure.

#### 9. Further Learning Opportunities

The doctor who has mastered 091201.00.7 "General Medicine" PEP, is ready to continue his/her studies in residency and post-graduate studies (theoretical chairs) with relevant professional programs.

I Approve

Head of Scientific Council

Rector /

N. Saribekyan

« 31 » 08 2020

### UNIVERSITY OF TRADITIONAL MEDICINE EDUCATIONAL PLAN

Profession: 091201.00.7 "General Medicine"

Appendix

Professional qualification "Doctor"

Duration of Education: 6 years Integrated educational program

State examination

SCHEDULE OF EDUCATIONAL PROCESS

L	September 29.				29.	C	octob	er.	27.		Nove	mver			Dece	mber		29.	J	anua	ry	26.	F	ebrua	ry	22		Ma	rch		20		April	
Year	1	8	15	22	-	6	13	20	- 0	3	10	17	24	1	8	15	22	-	5	12	19	- 20.	2	9	16	23.	2	9	16	13	30.	6	13	20
	7	14	21	28	5.	12	19	26	2.	9	16	23	30	7	14	21	28	4.	11	18	25	1.	8	15	22	1.	8	15	22	29	5.	12	19	26
1																		11	;;	::	::	11												10
2																		11	::	::	1::	//												
3																		11	::	::	1::	//												
4																		11	::	::	11	11												_
5																		11	::	::	1::	11			$\vdash$									
6							elia-are											11	::	1:	1::	11												

Time budget summary data / in weeks /

	27.		M	ay			Ju	ne		29.		July		27.		Au	gust							
Year	-	4	11	18	25	1	8	15	22	-	6	13	20	-	3	10	17	24	Theoretical education	Examination period	Educational practice	State examination	Holiday	Total
	3.	10	17	24	31	7	14	21	28	5.	12	19	26	2.	9	16	23	31	caucation	perioa	practice	CAUIIIIIucioii		
1						::	::	::	//	//	//	//	//	//	//	//	//	//	34	6			12	52
2				::	::	::	X	X	//	//	//	//	//	//	//	//	//	//	32	6	2		12	52
3				::	::	::	X	X	//	//	//	//	//	//	//	//	//	//	32	6	2		12	52
4		::	::	::	X	X	X	X	//	//	//	//	//	//	//	//	//	//	30	6	4		12	52
5		::	::	::	X	X	X	X	//	//	//	//	//	//	//	//	//	//	30	6	4		12	52
6						: ///	:///	:///											34	3		3	2	42
																			192	33	12	3	62	302

Theoretical education		Vacation	//
Examination period	::	Educational practice	X

: ///

#### **EDUCATIONAL PLAN**

							HO Inclu	URS ıding				Assess	sment						HOI Inclu	URS ıding				Assess	ment
N	Name of the subject	Weekly workload	Credit	Total	Auditorium	Lectures	Practical classes	Out of classes	Individual works	Consultation by the lecturer	Examination	Test	Examination	Weekly workload	Credit	Total	Auditorium	Lectures	Practical classes	Out of classes	Individual works	Consultation by the lecturer	Examination	Test	Examination
1	2	3	4	5	6	7	8	9	10	11	12	13	14	<i>15</i>	16	17	18	19	20	21	22	23	24	25	26
						7		er 17 ı					Ιy	rear				77.	semest	17.					
1.	Armenian Language	2	2	60	34	1 8	34	26	17	9		++		2	2	60	34	11 8	34	26	17	9		++	
2.	Latin	3	3	90	51		51	39	26	13		++		3	3	90	51		51	39	21	18		++	
3.	Foreign language	3	3	90	51		51	39	25	14		++		3	3	90	51		51	39	26	13		++	
4.	History of Medicine	3	3	90	51	34	17	39	26	13		++													
5.	History of Armenia	3	3	90	51	34	17	39	25	14		++													
6.	Biology	5	5	150	85	22	63	65	41	18	6		1	4	4	120	68	18	50	52	34	12	6		2
7.	Human Anatomy	4	4	120	68	18	50	52	34	12	6		1	4	4	120	68	20	48	52	34	12	6		2
8.	Mathematics, Medical informatics	3	3	90	51	18	33	39	21	18		++		2	2	60	34	16	18	26	17	9		++	
9.	Medical Physics													3	3	90	51	24	27	39	25	14		++	
10.	,	4	4	120	68	34	34	52	34	12	6		1												
11.	Bioorganic chemistry													4	4	120	68	34	34	52	34	12	6		2
12.	Histology, embryology, cytology													5	5	150	85	18	67	65	41	18	6		2
Tot	tal	<i>30</i>	30	900	510	160	<i>350</i>	<i>390</i>	249	<i>123</i>	18	6	3	<i>30</i>	<i>30</i>	900	510	<i>130</i>	380	<i>390</i>	249	117	24	5	4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
														vear					_						
						III	semes	ter 17	week									IV	semes	ter 15	week				
1	2	3	4	5	6	7	8	9	10	11	12	<i>13</i>	14	15	16	17	18	19	20	21	22	23	24	<i>25</i>	26
1.	Armenian Language	2	2	60	34		34	26	17	9		++													
2.	General Psychology	3	3	90	51	34	17	39	25	14		++													
3.	Medical Psychology													4	3	90	60	34	26	30	20	10		++	
4.	Philosophy	3	3	90	51	34	17	39	26	13		++													
5.	Biochemistry	5	5	150	85	30	55	65	42	23		++		3	3	90	45	18	27	45	32	7	6		4
6.	Microbiology, Virology, Immunology	4	4	120	68	22	46	52	34	18		++		5	5	150	75	26	49	75	51	18	6		4
7.	Human Anatomy	4	4	120	68	20	48	52	34	12	6		3												
8.	Normal Physiology	5	5	150	85	26	59	65	41	18	6		3	5	5	150	75	30	45	75	51	18	6		4
9.	Histology, embryology, cytology	4	4	120	68	18	50	52	34	12	6		3												
10.	Pathological Anatomy													5	5	150	75	30	45	75	51	18	6		4
11.	Public Health and Healthcare													3	2	60	45	16	29	15	9	6		++	
12.	Topographic anatomy and operative surgery													5	4	120	75	32	43	45	27	18		++	
Edı	ıcational internship														3	90	60		60	30					
Tot	tal	30	30	900	510	184	326	390	253	119	18	5	3	30	<i>30</i>	900	510	186	324	390	241	95	24	3	4
								-	-	_				year					_		_				
						V	semes	ter 17	week									VI	semes	ter 15	week				
1.	Pathological anatomy	4	4	120	68	26	42	52	34	12	6		5												
2.	Pathological Physiology	4	4	120	68	26	42	52	34	18		++		5	5	150	75	30	45	75	57	12	6		6
3.	Pharmacology	4	4	120	68	22	46	52	34	18		++		5	4	120	75	26	49	45	27	12	6		6
4.	Propaedeutics of Internal Diseases	6	5	150	102	42	60	48	30	12	6		5	5	5	150	75	30	45	75	57	12	6		6
5.	Hygiene	3	3	90	51	18	33	39	26	13		++		4	3	90	60	30	30	30	21	9		++	
6.	General surgery	3	3	90	51	18	33	39	26	13		++		4	4	120	60	22	38	60	42	12	6		6

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	<i>17</i>	18	19	20	21	22	23	24	25	26
7.	Emergency medicine													3	3	90	45	18	27	45	29	16		++	
8.	Topographic anatomy and operative surgery	3	4	120	51	20	31	69	51	12	6		5												
9.	Public Health and Healthcare	3	3	90	51	22	29	39	27	12		++													
10.	Radiological diagnosis													4	3	90	60	20	40	30	16	14		++	
Ed	ucational internship														3	90	60		60	30					
То	tal	30	30	900	510	194	316	390	262	110	18	5	3	30	30	900	510	176	334	390	249	<i>87</i>	24	3	4
													IV	year											
						VII	semes	ster 17	week									VIII	T semes	ster 13	week	•			
1.	Medical genetics													4	3	90	52	24	28	38	24	14		++	
2.	Epidemiology	4	4	120	68	24	44	52	34	12	6		7												
3.	Internal Diseases	6	6	180	102	34	68	78	51	21	6		7	6	5	150	78	34	44	72	54	12	6		8
4.	Surgical diseases, pediatric surgery	4	4	120	68	30	38	52	34	18		++		4	4	120	52	20	32	68	50	12	6		8
5.	Traumatology and orthopedics	4	4	120	68	24	44	52	34	18		++		4	3	90	52	20	32	38	20	12	6		8
6.	Diseases of the nose, throat, ear													4	3	90	52	24	28	38	24	14		++	
7.	Dermatovenereological diseases	4	4	120	68	24	44	52	34	18		++													
8.	Obstetrics and gynecology	4	4	120	68	24	44	52	34	12	6		7	4	3	90	52	22	30	38	20	18		++	
9.	Neurology	4	4	120	68	22	46	52	34	18		++		4	3	90	52	18	34	38	20	12	6		8
Ed	ucational internship														6	180	120		120	60					
То	tal	30	30	900	510	182	328	390	255	117	18	4	3	30	30	900	510	162	348	390	212	94	24	3	4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
					<u>.</u>			<u>.</u>	_	-			Vy	ear				-	_	<u>-</u>		-			
						IX s	emeste	<i>r 17</i> и	veek									Xs	emest	er 13 v	veek				
1.	Sports medicine													5	4	120	65	24	41	55	37	18		++	
2.	Internal diseases	4	4	120	68	20	48	52	34	12	6		9	4	3	90	52	20	32	38	20	12	6		10
3.	Infectious diseases	4	4	120	68	22	46	52	34	12	6		9	4	3	90	52	18	34	38	24	14		++	
4.	Phthisiology													6	5	150	78	32	46	72	54	18		++	
5.	Pediatrics													5	4	120	65	36	29	55	37	12	6		10
6.	Ophthalmologic Diseases	4	4	120	68	24	44	52	34	18		++													
7.	Surgical diseases, pediatric surgery	3	3	90	51	16	35	39	21	18		++		3	3	90	39	14	25	51	33	12	6		10
8.	Urology	2	2	60	34	12	22	26	17	9		++													
9.	Obstetrics and Gynecology	3	3	90	51	14	37	39	21	12	6		9	3	2	60	39	14	25	21	3	12	6		10
10.	Acupuncture	4	4	120	68	34	34	52	34	18		++													
11.	Manual therapy	3	3	90	51	20	31	39	27	12		++													
12.	Phytotherapy	3	3	90	51	26	25	39	21	18		++													
Edu	cational internship														6	180	120		120	60					
Tota	al	30	30	900	510	188	322	390	243	129	18	6	3	30	30	900	510	158	352	390	208	98	24	3	4
									=			-	VIy	ear						<u>=</u>					
					ı	XI s	emeste	<i>r 17</i> и	veek	1		-						XII	semes	ter 17	week	1			
1.	Internal diseases	4	4	120	68	26	42	52	34	18		++		4	3	90	68	26	42	22	4	18		++	12
2.	Endocrinology	2	2	60	34	14	20	26	17	9		++													
3.	Pediatrics	5	5	150	85	36	49	65	47	12	6		11												
4.	Immunology and Allergology													2	2	60	34	16	18	26	17	9		++	
5.	Physiotherapy	2	2	60	34	16	18	26	17	9		++													
6.	Psychiatry													3	3	90	51	24	27	39	25	14		++	

1	2	3	4	5	6	7	8	9	10	11	12	<i>13</i>	14	<i>15</i>	16	17	18	19	20	21	22	23	24	25	26
7.	Polyclinic therapy													3	3	90	51	20	31	39	26	13		++	
8.	Clinical pharmacology													3	3	90	51	18	33	39	26	13		++	
9.	Surgical diseases, pediatric surgery	2	2	60	34	14	20	26	14	12		++		4	3	90	68	20	48	22	16	6		++	12
10.	Anesthesia and resuscitation													4	4	120	68	24	44	52	34	18		++	
11.	Obstetrics and Gynecology	3	3	90	51	18	33	39	27	12		++		3	2	60	51	18	33	9	3	6		++	12
12.	Oncology	4	4	120	68	24	44	52	34	12	6		11												
13.	Family medicine	4	4	120	68	24	44	52	34	12	6		11												
14.	Dentistry	3	3	90	51	24	27	39	27	12		++													
15.	Sectional course	1	1	30	17	4	13	13	8	5		++													
16.	Forensic medicine													4	4	120	68	24	44	52	34	18		++	
* Fir	nal certification														3	90				90	60		30		
Tota	al e	30	30	900	510	200	310	390	259	113	<i>18</i>	7	3	30	30	900	<i>510</i>	190	320	390	245	115	<i>30</i>	9	3
								Ada	litiona	ıl elec	tive co	ourses	IV v												

													<i>IV y</i>	ear											
						VII se	emeste	e <i>r 17</i> v	veek									VIII s	semest	<i>er 13</i> 1	week				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.	Iridodiagnostics	3	2	60	51	24	27	9				++	7												
2.	Embryology													3	2	60	39	14	25	21				++	8
													Vye	ear											
						IX se.	meste.	<i>r 17</i> и	veek									Xse	meste.	r 13 w	eek				
1.	Pharmacognosy	3	2	60	51	24	27	9				++	9												
2.	Phytotherapy													3	2	60	39	16	23	21				++	10
3.	Acupuncture													23	2	60	39	16	23	21				++	10

1	2	3	4	5	6	7	8	9	10	11	12	13	14	<i>15</i>	16	<i>17</i>	18	19	20	21	22	23	24	25	26
				_	_	-	-		-				VI y	ear											
		XI semester 17 week																XII s	emeste	er 17 <sub>.</sub>	year				
1.	Acupuncture	3	2	60	51	24	21	9				++	11												
									Opt	ional c	ourse														
1.	Physical education	4						136						4						128					

#### **EDUCATIONAL INTERNSHIP**

•	Nurse Assistant	3 credits	90 hours	II year	4 <sup>th</sup> semester
•	Manipulation Nurse Assistant	3 credits	90 hours	III year	6 <sup>th</sup> semester
-	Doctor's assistant / therapy /	3 credits	90 hours	IV year	8th semester
-	Doctor's assistant / surgery /	3 credits	90 hours	IV year	8th semester
-	Doctor's assistant / obstetrics and gynecology /	3 credits	90 hours	V year	10 <sup>th</sup> semester
•	Assistant to the ambulance doctor	3 credits	90 hours	V year	10 <sup>th</sup> semester
To	tal	18 credits	540 hours		

#### \* Final Attestation

- 1. Internal diseases
- 2. Surgical diseases
- 3. Obstetrics and gynecology

Note: 1. Clinical practice classes are held in appropriate clinics.

2. Educational internships are intended for conducting shifts or cycles on duty in clinics.



091201.00.7-Map of the results of the main modules of the continuing-integrated educational program of "General Medicine" profession

Formulation of general end-results

Nº		GE-1	GE-2	GE-3	GE-4
1.	History of Armenia				Х
2.	Armenian language				Х
3.	Latin				Х
4.	History of medicine	X			
5.	General psychology	X	X		X
6.	Medical psychology		X	X	
7.	Philosophy	X			
8.	Foreign language				X
9.	Medical physics	X			
10.	Mathematics, medical informatics	X			
11.	General chemistry	Х			
12.	Bioorganic chemistry	X			
13.	Biology	X			
14.	Biochemistry	Х			
15.	Human Anatomy				
16.	Topographic anatomy and operative surgery	X	X	X	X
17.	Histology, embryology, cytology				
18.	Normal physiology	X			
19.	Bacteriology, virology, immunology	X			
20.	Pharmacology	X	х	X	
21.	Pathological anatomy	х			
22.	Pathological physiology	x			
23.	Internal disease propedication	x			
24.	Internal diseases	x	x	x	
25.	Endocrinology				
26.	Dermatovenereological diseases				
27.	Radiological diagnosis	X			

Nº		GE-1	GE-2	GE-3	GE-4
28.	Neurology	<u>x</u>			
29.	Phthisiology	Λ	X		
30.	Psychiatry		X	X	
31.	Forensic medicine	X	X		
	Oncology				
32.	Infectious diseases				
33.	Physiotherapy				
34.	Polyclinic therapy				
35.					
36.	Clinical pharmacology				
37.	Acupuncture	X			
38.	Phytotherapy				
39.	Manual therapy				
40.	General surgery		X	X	
41.	Surgical diseases, pediatric surgery	X	X		
42.	Urology				
43.	Traumatology and orthopedics	X		X	
44.	Anesthesia and resuscitation				
45.	Eye diseases				
46.	Diseases of the nose, throat, ear				
47.	Emergency medicine		X	X	X
48.	Pediatrics	X			
49.	Obstetrics and gynecology	X			
50.	Hygiene	X			
51.	Public health and health care	X			
52.	Epidemiology		X		
53.	Immunology and allergology				
54.	Sectional course	X			
55.	Family medicine	X	X	X	X
56.	Sports medicine	X	A	<b>A</b>	A
57.	Dentistry	X			
58.	Medical genetics	X			
50.	Additional optional courses				
1.	Pharmacognosy Pharmacognosy	X	X	X	
2.	Acupuncture	X	Λ	Α	
3.	Phytotherapy				
4.	Iridodiagnostics				
5.	Embryology				
1	Optional course  Physical Training				
1.	1 mysical Hailing				

### Formulation of general profesional end-results

N		GPE-1	GPE -2	GPE -3	GPE -4	GPE -5	GPE -6	GPE -7	GPE -8	GPE -9
1.	History of Armenia									
2.	Armenian language	X	X			X				
3.	Latin	X	x							
4.	History of medicine	X								
5.	General psychology			X	X					
6.	Medical psychology			X						
7.	Philosophy			X						
8.	Foreign language	X	X			X				
9.	Medical physics						X			х
10.	Mathematics, medical informatics	X				X	X			
11.	General chemistry						X			
12.	Bioorganic chemistry						X			
13.	Biology	X					X			
14.	Biochemistry						X		X	
15.	Human Anatomy	х					X		х	
16.	Topographic anatomy and operative surgery	x			X			X	X	х
17.	Histology, embryology, cytology	х					X		X	
18.	Normal physiology	x					X		X	
19.	Bacteriology, virology, immunology	x							X	
20.	Pharmacology	X				X		х		
21.	Pathological anatomy	х		х		X			X	
22.	Pathological physiology	x					X		X	
23.	Internal disease propedication				х	X				х
24.	Internal diseases	x			Х			X	X	
25.	Endocrinology				Х				X	
26.	Dermatovenereological diseases				х			X	X	
27.	Radiological diagnosis	x			Х	X				х
28.	Neurology				х			X	X	
29.	Phthisiology				Х	X		X	X	
30.	Psychiatry			Х	X			X		
31.	Forensic medicine	х		X	X	X	X		X	
32.	Oncology			х	Х			X	X	
33.	Infectious diseases				X			X	X	

Nº		GPE-1	GPE-2	GPE-3	GPE-4	GPE-5	GPE-6	GPE-7	GPE-8	GPE-9
34.	Physiotherapy				X			X		х
35.	Polyclinic therapy					X				
36.	Clinical pharmacology							X	X	
37.	Acupuncture	X			X				х	X
38.	Phytotherapy	x			X			Х	X	
39.	Manual therapy				X				X	x
40.	General surgery				X				X	х
41.	Surgical diseases, pediatric surgery				X			Х	X	х
42.	Urology				X			X	X	х
43.	Traumatology and orthopedics				X			X	X	х
44.	Anesthesia and resuscitation			X	X		X	Х	X	х
45.	Eye diseases	X			X	X	X	Х	х	х
46.	Diseases of the nose, throat, ear	х			X	X	X	X	х	х
47.	Emergency medicine			x				х		
48.	Pediatrics			x	X	Х	X	X	х	x
49.	Obstetrics and gynecology	x			X	X	X	X	X	х
50.	Hygiene						X			
51.	Public health and health care					X				
52.	Epidemiology				X	X				
53.	Immunology and allergology	X			X			X	X	х
54.	Sectional course	X				X			X	
55.	Family medicine			X	X	X			X	
56.	Sports medicine	X					X		X	
57.	Dentistry	X		x	X	x		х	х	x
58.	Medical genetics	X					X		x	
	Additio	nal opti	onal c	ourses						
1.	Pharmacognosy	x						X		
2.	Acupuncture	х			X				Х	х
3.	Phytotherapy	х			X			X	х	
4.	Iridodiagnostics					X			Х	х
5.	Embryology	x					X		Х	
	Oŗ	otional	course	e				1	ı	
1.	Physical Training									

### Formation of professional end-results

N		PE-1	PE-2	PE-3	PE-4	PE-5	PE-6	PE-7	PE-8	PE-9	PE-10	PE-11	PE-12	PE-13	PE-14
1.	History of Armenia	Ь	Ь	Ь	P	P	Ь	P	Ь	P	PI	PI	PI	PI	PI
2.	Armenian language														
3.	Latin														
4.	History of medicine														
5.	General psychology														
6.	Medical psychology	x		X	X					x					
7.	Philosophy														
8.	Foreign language														
9.	Medical physics														
10.	Mathematics, medical informatics														
11.	General chemistry														
12.	Bioorganic chemistry														
13.	Biology														
14.	Biochemistry														
15.	Human Anatomy														
16.	Topographic anatomy and operative surgery								х						
17.	Histology, embryology, cytology														
18.	Normal physiology														
19.	Bacteriology, virology, immunology	x												X	
20.	Pharmacology										x				
21.	Pathological anatomy			X	X									X	
22.	Pathological physiology	x			X									X	
23.	Internal disease propedication	x		X	X										
24.	Internal diseases	x	х	X	X	X	X	X	x			X	X	X	X
25.	Endocrinology		х	X	X		X		х			X	X	X	X
26.	Dermatovenereological diseases		Х	X	X		X					x	X	X	X
27.	Radiological diagnosis	x		X	X								X	X	
28.	Neurology	x	х	X	X		X	X	х			x	X	X	X
29.	Phthisiology	x	х	X	X		X		х			x	X	x	
30.	Psychiatry	x	х	X	X		X	X	х			x	X	x	
31.	Forensic medicine			X	X	X								X	
32.	Oncology	x	х	X	X		X					x	X	X	
33.	Infectious diseases	x		X	X		X	X	х			x	X	x	
34.	Physiotherapy						X				х			X	
35.	Polyclinic therapy		х		X	X									X

Nº		PE-1	PE-2	PE-3	PE-4	PE-5	PE-6	PE-7	PE-8	PE-9	PE-10	PE-11	PE-12	PE-13	PE-14
36.	Clinical pharmacology										x				
37.	Acupuncture	X		Х			Х				X				
38.	Phytotherapy	X					X				x				
39.	Manual therapy						X				x				
40.	General surgery	X		х											
41.	Surgical diseases, pediatric surgery	X	х	X	X	X	X	X	x				х	х	
42.	Urology	X	х	X	X		X	X				x	х	х	
43.	Traumatology and orthopedics	X	х	X	X	X	X	X	х	х		x	х	х	-
44.	Anesthesia and resuscitation			x					x					x	-
45.	Eye diseases	X	x	x	X	X	x	X	x			x	x	x	-
46.	Diseases of the nose, throat, ear	X	X	х	X	X	X	X	x			x	x	x	-
47.	Emergency medicine	X								X				x	X
48.	Pediatrics	X	X	х	X		х	X	x			x	x	x	X
49.	Obstetrics and gynecology	X		х			х	X	x			x	x	x	X
50.	Hygiene	X									x	x		x	X
51.	Public health and health care													x	X
52.	Epidemiology	X	Х							х			х	х	X
53.	Immunology and allergology	X	х	х	X		х	X				X	х	x	
54.	Sectional course			X	X								х		
55.	Family medicine	X	Х	X	X		X	X	х			x	х		X
56.	Sports medicine	X			X									X	
57.	Dentistry	X	Х	X		X						x	х	х	
58.	Medical genetics	X		X	X	X						X	X	X	X
	Additi	onal	opti	onal	cou	rses									
1.	Pharmacognosy										X			x	
2.	Acupuncture	X		х			х				X				_ <del></del>
3.	Phytotherapy	X					х				X				
4.	Iridodiagnostics	X		X	X										
5.	Embryology														
		ptic	nal	cou	rse										
1.	Physical Training														

I confirm

Chairman of the Scientific Council

Rector N. Kh. Saribekyan

«31» 08 2020

091201.00.7- RESULTS OF PROFESSIONAL EDUCATIONAL PROGRAMS OF "GENERAL MEDICINE"

### AND COMPATIBILITY OF THE SCOPES OF RA NOF

End- results												nes of												
of the UTM				6	th lev	el (Ba	achel	or)								7	th lev	el (N	Iaster	.'s)				
	K1	P1	P2	P3	P4	P5	P6	<b>A</b> 1	A2	A3	A4	K1	K2	P1	P2	P3	P4	P5	<b>A</b> 1	A2	A3	A4	A5	A6
GE-1			+			+							+				+	+						
GE-2									+		+			+					+					
GE-3									+					+					+					
GE-4			+						+		+										+			
GPE-1				+										+		+	+							
GPE-2			+												+									
GPE-3		+	+												+						+			
GPE-4					+	+						+	+			+	+			+		+		
GPE-5				+					+						+	+					+			
GPE-6	+				+								+				+							
GPE-7	+	+					+	+				+	+					+						
GPE-8	+	+	+		+	+		+				+	+											
GPE-9	+	+						+				+	+	+		+								

	K1	P1	P2	P3	P4	P5	P6	<b>A</b> 1	A2	A3	<b>A4</b>	K1	K2	P1	P2	Р3	P4	P5	<b>A</b> 1	A2	<b>A3</b>	A4	A5	A6
PE-1	+		+		+			+				+	+		+		+	+						
PE-2	+		+		+			+				+	+	+				+		+				
PE-3	+	+		+	+	+		+				+	+				+							
PE-4	+	+	+	+	+	+		+				+	+				+	+				+		
PE-5	+				+	+		+				+	+				+					+		
PE-6	+	+	+		+	+		+				+	+				+					+		
PE-7	+	+			+	+		+				+	+				+					+		
PE-8	+	+				+		+				+	+				+		+			+		
PE-9	+	+	+	+	+	+		+	+			+	+		+	+	+		+					
PE-10	+		+					+				+	+				+					+		
PE-11	+		+	+	+	+		+	+			+	+		+			+		+				
PE-12	+	+	+	+	+	+	+	+				+	+		+					+				
PE-13	+	+	+	+	+	+	+	+				+	+	+		+		+		+				
PE-14	+	+	+	+	+	+	+	+				+	+	+	+	+		+		+				



### Continuing-integrated educational program of "General Medicine" profession COURSE DESCRIPTION

NAME OF THE COURSE	ARMENIAN LANGU	ARMENIAN LANGUAGE							
TYPE OF COURSE	Mandatory								
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL								
	PROGRAM								
THE FORM OF TRAINING	Full time								
PROFESSION	Doctor	Doctor							
FACULTY	General Medicine								
COURSE	I, II	SEMESTER	I, II, III						
ACADEMIC YEAR	2020-2021		•						

CREATOR	Anahit Karapetyan
	Amalya Grigoryan
	Tatevik Khachatryan
PHONE	+374 91 61 15 00, +374 91 58 24 41, +374 91 53 45 67
E-MAIL	anahit.karapetyan.54@mail.ru, grigoryan-amalya@mail.ru,
	tatevyerevan@gmail.com

CHAIR	Humanitarian subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Tatevik Khachatryan

#### **COURSE VOLUME**

Year	Semester	Credit	ACADEMIC week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
	I	2	17	2	60	34	1	34	17	9	1	+
I	II	2	17	2	60	34	-	34	17	9	-	+
	III	2	17	2	60	34	1	34	17	9		+
Total		6	51	6	180	102	-	102	51	27	-	

1.PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

#### Knowledge:

1. Grammatical knowledge of the native and foreign languages formed at school.

#### Abilities:

1. Combining the grammar knowledge of the mother tongue with the grammar system of the

- language being taught.
- 2. Perception of lexical, structural commonalities and differences between native and foreign languages.
- 3. Comparison of communication opportunities in mother tongues and foreign languages.

#### Possession:

1. Ability to apply the acquired knowledge in written and oral speech.

#### 2. BRIEF CONTENT OF THE COURSE

The study of the Armenian language takes place in two stages: the" initial course "stage begins with the study and includes a subsection "related written and oral word", secondly, at the" basic course" stage, linguistic and grammatical realities are taught more systematically, contributing to the deepening of knowledge acquired already at the initial course, the development of communication capabilities and skills.

#### 3. GOAL AND OBJECTIVES OF THE COURSE

The goal of the course is to teach the sound-letters of the modern Armenian alphabet, to form the initial abilities to read and write, to further study the necessary syntactic knowledge that contributes to the compilation of oral and written-related speech, to develop oral speech through text works-text texts, conversations, dialogues, to gradually develop a cooperative and medical-scientific vocabulary.

#### 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

#### Know:

- **K1.** The alphabet of the Armenian language, literate signs of sounds (uppercase and lowercase, handwritten and printed), the phonetic system of the Armenian language, concerning the spelling of vowels and consonants.
- **K2.** Types of words by composition, form and meaning, the minimum vocabulary necessary for communication: a) necessary words related to the educational process, b) action, words denoting an attribute of the subject, c) a phrase concerning everyday life.
- **K3.** With the help of text works-real texts, conversations, dialogues-to develop oral speech, gradually develop vocabulary, strengthen language knowledge.
- **K4.** The main elements of admixtures of oblique parts of speech, the practical application of uneven parts of speech.
- **K5.** Sentence structure, ways of conjugating the words that make up the sentence, short and extensive, simple and complex sentences, types of sentences for the purpose of communication (narrative, interrogative, imperative and exclamation), their punctuation, basic terms and terminological connections related to professional courses, structures inherent in the scientific style, language realities.

#### Be able to

- **A1.** Distinguish by hearing the sounds of the Armenian language and consonants.
- **A2.** Recognize the components of a word. Synonyms with high frequency, the use of antonyms in speech as needed.
- **A3.** Correctly apply the inclined forms of the nominal and verbal systems, independently build a coherent word.
- **A4.** Perceive the syntactic structure of the Armenian language, compose small texts, summarize the text read, build dialogues while observing the syntactic rules of the Armenian language.
- **A5.** Read, understand and reproduce simple professional texts from simple sentences, highlighting professional words and phrases, make sentences with them.
- **A6.** Acquire and use the necessary information materials from various written sources (dictionary, encyclopedia, press, reference books, Internet, etc.).

#### Possess

- **P1.** Self-expression in appropriate situations, grammatically correct construction of sentences and the skills of correct handling.
- **P2.** The ability to use a dictionary, an encyclopedia, reference literature, as well as printed and electronic sources, the ability to read popular science, professional literature, and the ability to rewrite what you read.

#### 5. LITERATURE

- 1. Chair material
- 2. V. Gevorkian, East Armenian Course, Yerevan, 2000.
- 3. Dora Sakayan, Eastern Armenia, For the English Speaking World, YSU Press, 2007:
- 4. Գուրգեն Գևորգյան, Արտակ Գալստյան, «Անգլերեն-հայերեն առավել գործածական բժշկական բառեր և բառակապակցություններ», Երևան, «Արեգ», 2005թ.:
- 5. Աստղիկ Ավետիսյան, «Պատկերազարդ հայոց լեզու» (անգլախոս ուսանողների ուսուցման սկզբնափուլ), Երևան, 2004թ.։
- 6. Լ.Կ. Մուրադյան, «Սովորում ենք գրել, կարդալ, խոսել հայերեն», (անգլախոս ուսանողների համար, ուսուցման սկզբնական փուլ), Երևան, 2011թ.:
- 7. Ա. Շ. Ավետիսյան, «Հայոց լեզու» (Ձեռնարկ անգլախոս ուսանողների համար), Տեքստեր և վարժություններ, Երևան, 2004թ.։
- 8. «Հայոց լեզու», ԵՊԲՀ Ա.Գ. Ավետիսյանի խմբագրությամբ, ուսումնական ձեռնարկ, Երևան, 2009։

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

### 7. EVALUATION SYSTEM / RATING / SYSTEM

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	LATIN							
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM							
THE FORM OF TRAINING	Full time	Full time						
PROFESSION	Doctor							
FACULTY	General Medicine							
COURSE	I	SEMESTER	I, II					
ACADEMIC YEAR	2020-2021							

CREATOR	Viktorya Tumanyan, Zhanna Hakobyan, Kristina Mezhlumyan
PHONE	+374 91 80 06 13, +374 77 04 19 74, +374 77 99 74 71
E-MAIL	vdoxoyan75@mail.ru, zhanna.mousisyan@mail.ru,
	Kristina_mezhlumyan@yahoo.com

CHAIR	Humanitarian subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Tatevik Sedrak Karapetyan

#### **COURSE VOLUME**

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
т	I	3	17	3	90	51		51	26	13		+
1	II	3	17	3	90	51		51	21	18		+
Total		6	34	6	180	102		102	47	31		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

#### Knowledge

- 1. sufficient knowledge of English grammar (phonetics, lexicology, morphology, syntax)
- 2. anatomical vocabulary
- 3. communication in native and foreign languages

#### **Abilities**

- 1. understand and analyze grammatical materials
- 2. compare English with Latin
- 3. draw comparisons between English and Latin
- 4. ability of doing individual work and the right management of the time
- 5. ability of improving
- 6. ability of critical thinking and studying of scientific literature

#### Possessions

- 1. social skills
- 2. cultural competence

- 3. team work
- 4. oral communication
- 5. moral responsibility towards the person and the others
- 6. endurence and adaptation

#### 2. BRIEF CONTENT OF THE COURSE

The course includes the teaching of anatomical, histological, pharmacological, pathological and clinical terms. The course will enable foreign students to get acquainted with the active vocabulary used in anatomy, as well as the pathological and clinical terms formed on the base of Latin and Greek bilingualism, which promote the students' attainment of residual knowledge, which later enables to get acquainted with medical literatute in a foreign language, as almost all European (except German which prioritize the native-formed terms, rather than international ones ) and western medical literature uses merely Greek-Latin terms.

#### 3. GOAL AND OBJECTIVES OF THE COURSE

#### 3.1. The goal of the course

To teach Greek-Latin anatomical, clinical and pharmaceutical medical terms.

#### 3.2. Course problems

- Introduce the content of the word-formation of medical terms.
- To design the abilities of reading and writing.
- To teach a new vocabulary to form new narrow professional terms in future.

#### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know

- K1. Latin grammar.
- K2. Latin and Greek prefixes and suffixes, word-forming elements.
- K3. Latin (Greek) terminology according to the international anatomical vocabulary.
- K4. The translations and shortenings of recipes.
- K5. Pathological, clinical, stomatological, pharmaceutical terminology.

#### Be Able to

A1. To make use of academic, scientific, public literature for the professional activity

#### **Possess**

- P1. The skills of formation of Latin terms, the skills of the use of medical terminology during the teaching of professional courses.
- P2. Medical vocabulary and the grammatical nuances used in medicine.
- P3. The abilities to communicate with foreign doctors on professional level.

#### 5. LITERATURE

- 1. Chair material.
- 2. Balabanyan V.M., Stepanyan N.S. "Latin manual for first year foreign medical students", Yerevan, 2008, YSMU after M.Heratsi.
- 3. Banay, G. "An introduction of medical terminology. Greek and Latin derivations", Worcester.
- 4. Budzowska M. "Medical Latin Course", Todz, 2007, www.pbs.org.
- 5. Kondratev D., Yylegzanina O., Knyazeva J. "Latin and fundamentals of medical terminology for medical students", Grodno, 2005, ISBN 985-496-063-3.
- 6. Katarzyna Joskovska, Zenon Grabarczyk. "Greek and Latin in medical terminology". 2013. ISSN 2300-5432
- 7. Առաքելյան Հ.Թ., Բալաբանյան Վ.Մ., Տիրացյան Գ.Գ., Ստեփանյան Ն.Ս. «Լատիներեն լեզու և բժշկական տերմինաբանություն» Երևան, 2008, ISBN 978-99941-40-59-6.
- 8. Чернявский М. Н. «Латинский язык и основы медицинской терминалогии». МОСКВ, 2007.

6. ASSESSMENT COMPONENTS						
Attendances						
Assessment of knowledge acquisi	tion, abilities and skills		70			
Independent individual work			14			
7. ASSESSMENT SYSTEM /RATI	NG / SYSTEM					
Mark	Assessment Point	Assessment	letter			
"Excellent"	rellent" 96-100 A+					
"Good" 80-89 B+						
70-79 B						
"Satisfactory" 60-69 C+						
51-59 C						
"Unsatisfactory"	" 50 and below D					
"Tested"	≥51	S				
"Untested" < 51 U						

NAME OF THE COURSE	FOREIGN LANGUA	GE, ENGLISH					
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	I	SEMESTER	I, II				
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Tatevik Karapetyan					
	PhD Tatevik Simonyan					
PHONE	+374 93 77 25 99, +374 94 11 30 90					
E-MAIL	karapetyants@yahoo.com, tatevsimonyan85@mail.ru					

CHAIR	Humanitarian subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Tatevik Karapetyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	I	3	17	3	90	51	-	51	25	14		+
	II	3	17	3	90	51	-	51	26	13		+
Total			6	34	6	180	102	-	102	51	27	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 1. Sufficient knowledge of English,
- 2. Perception of lexical, structural similarities and differences of native and foreign languages,
- 3. Comparison of communication opportunities in native and foreign languages.

### Abilities:

- 1. understand and analyze grammatical materials in the native language,
- 2. to combine the mother tongue with English,
- 3. make comparisons between the mother tongue and English,
- 4. free oral-written communication in English,
- 5. ability to do independent work and proper time management,
- 6. ability to improve,
- 7. ability to study critical thinking, reasoning, scientific literature.

### Possessions:

1. social skills,

- 2. cultural competence,
- 3. team work,
- 4. verbal communication,
- 5. moral responsibility towards the person and others,
- 6. durability and adaptability.

### 2. BRIEF CONTENT OF THE COURSE

The course is aimed at developing the humanitarian thinking of future doctors, as a result of which students outside the language can differentiate the patient's behavior and reactions, to develop and strengthen joint work with future partners in the medical team, in particular, in the volume of oral presentations and research work (present and / or publish research results), intercultural awareness and communication (communication with patients).

### 3. GOAL AND OBJECTIVES OF THE COURSE

### 3.1. The goal of the course

The goal of the course is to develop students' oral skills, to deepen their grammar knowledge, to enrich their vocabulary, to develop the skills of speaking-listening, choosing and applying professional terms and terminological connections correctly, analyzing and reproducing available professional texts.

### 3.2. Course objective

- Conduct a variety of English speaking activities with students, improving the accuracy and clarity of spoken language,
- Develop students' listening ability through thematic audio-video materials,
- Improve reading skills,
- Strengthen the grammar of the language in practice.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know

- K1. general and basic professional vocabulary templates,
- K2. parts of speech, sentence parts, syntax of simple and complex sentences,
- K3. doctor-patient and doctor-colleagues communication skills,

#### Be Able to

- A1.translate, reproduce special medical texts with a dictionary and without dictionary,
- A2.convey the general content of English texts,
- A3.conduct everyday and professional conversations,
- A4. write personal and business letters,
- A5.compose the correct word (oral, written) following the rules of speech culture,
- A6.orient themselves in different situations of socio-cultural communication.

### **Possess**

- P1. English as a means of intercultural communication,
- P2. professional and non-technical vocabulary,
- P3. professional oral and written speech, and their nuances.

- 1. Chair material
- 2. MacCarter S., Oxford English for Careers: Medicine 1, ISBN: 978-0-19-402300-9, 2013.
- 3. MacCarter S., Oxford English for Careers: Medicine 2, ISBN: 978-0-19-456956-9, 2014.
- 4. Sean O. Henderson, Emergency Medicine, ISBN: 1-57059-668-9, Copyright ©2006 Landes Bioscience, Georgetown, Texas, U.S.A.
- 5. Murphy, R., Essential Grammar in Use, Cambridge University Press 2015.
- 6. Thomson A., Martinet A. "A Practical English Grammar", oxford University Press.

6. ASSESSMENT COMPONENTS						
Attendances						
Assessment of knowledge acquisi	tion, abilities and skills		70			
Independent individual work			14			
7. ASSESSMENT SYSTEM /RATI	NG / SYSTEM					
Mark	Assessment Point	Assessment	letter			
"Excellent"	ellent" 96-100 A+					
"Good" 80-89 B+						
70-79 B						
"Satisfactory" 60-69 C+						
51-59 C						
"Unsatisfactory"	y" 50 and below D					
"Tested"	≥51	S				
"Untested" < 51 U						

NAME OF THE COURSE	HISTORY OF MEDIC	CINE				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	I	SEMESTER	I			
ACADEMIC YEAR	2020-2021					

CREATOR	PhD Donara Karapetyan, Lilit Sukiasyan
PHONE	+374 91 42 34 77, +374 91 36 38 16
E-MAIL	Lilit.sukiasyan@inbox.ru

CHAIR	Humanitarian subjects
CLINICAL BASE	-
HEAD OF CHAIR	Ph.D. Tatevik Karapetyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	I	3	17	3	90	51	34	17	26	13		+
Total		3	17	3	90	51	34	17	26	13		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 1. prominent discoveries in the science of biology, the role of biological science in shaping the modern naturalistic picture of the world,
- 2. on the structure, types and forms of governance of the patterns of development of human society.

#### Abilities:

- 1. analyze biological phenomena and patterns of natural processes,
- 2. distinguish the peculiarities of the development of human society in different periods.

### Possessions:

1. to work with biological literature, lecture summaries.

### 2. BRIEF CONTENT OF THE COURSE

The course "History of Medicine" examines the stages of the historical development of medicine, the diseases that are common in different eras, the peculiarities of the development of medicine, depending on the religious considerations and the region.

### 3. GOAL AND OBJECTIVES OF THE COURSE

### 3.1. The goal of the course

The goal of the course is to raise the level of general and professional knowledge of the student, playing a very important role in preparing the future doctor, teaching the history of medicine, helping students to enter the professional world.

### 3.2. Course objective

- During the lectures and practical lessons, study the history of medicine of all the peoples of the world, from the earliest times to the present day.
- Get acquainted (gain, obtain) with present-day techniques that came from World Medical Schools.
- Teaching the moral principles of the most important medical humanists Hippocrates, Galen, Ibn Sina, Ar-Razi, Mkhitar Heratsi, Amirdovlat Amasiatsi and others - contributed to the improvement of the moral image of the young doctor.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

K1. the long journey of medicine from antiquity to the present day, the history of medical systems and medical schools, their founders, the development of Armenian medicine and flourishing periods, the life of famous Armenian doctors, the role of the latter in the development of world medicine,

#### Be able to

- A1. use educational, scientific, popular literature and the Internet for professional activities,
- A2. demonstrate a competent approach to the practice of medical practice during scientific discussions on the history of medicine,
- A3. when communicating with patients, apply knowledge gained from medical history, medical ethics, and culture acquired through study,

#### Possess:

P1. skills in working with sources.

### 5. LITERATURE

- 1. Chair material
- 2. Հայաստանի Բժշկության Պատմություն, դասագիրք/ Ս. Վարդանյան, Երևան, 2000;
- 3. Բժշկության Պատմություն, դասագիրք/ Յ. Լիսիցին, Մոսկվա, 2015.
- 4. Աբուսայիդ.Յաղագս կազմութեան մարդոյ,քննական բնագիրը,ռուսերեն թարգմանությունը և առաջաբանը Ս.Վարդանյանի,Երևան,1974
- 5. Ամիրդովյաթ Ամասիացի.Անգիտաց անպէտ,խմբ. Կ. Բասմաջյանի,Վիեննա,1926։
- 6. Ասար Մեբաստիացի.Գիրք բժշկական արհեստի,աշխ. Դ.Կարապետյանի, Երևան, 1993։
- 7. Գրիգոր Նարեկացի. Տեսուրիւն ի մարդոյն կազմութիւն,քննական բնագիրը, առաջաբանը և ծանոթագրությունները Ստելյա վարդանյանի, Էջմիածին, 2008։
- 8. Гипократ. Избраные книги, Москва, 1936,
- 9. Иба Сина. Канон врачебной науки в 5 томах, Ташкент,
- 10. Porter Roy. The Greatest benefit to Mankind. A Medical History of Humanity, New York, London,1998,
- 11. Singer Ch., Underwood A. A short History of medicine, Oxford, 1962

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+

	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	HISTORY OF ARMI	ENIA				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM					
THE FORM OF TRAINING	Full time	Full time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine					
COURSE	I	Semester	Ι			
ACADEMIC YEAR	2020-2021					

CREATOR	PhD, Associate Professor Armen Emil Khachikyan, PhD,
	Associate Professor Marine Gevorgyan
PHONE	+374 91 20 15 05, +374 91 30 30 53
E-MAIL	armen@fulbrightmail.org, manan21@mail.ru

CHAIR	Humanitarian subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Tatevik Karapetyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	I	3	17	3	90	51	34	17	25	14		+
Total		3	17	3	90	51	34	17	25	14		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge

- 1. perceptions of the upward development process of human society,
- 2. about the Earth's climatic conditions, minerals, flora and fauna,
- 3. general idea of the political map of the world, the location of countries and states,
- 4. basic knowledge about religions,
- **5.** basic knowledge of time management and calendar.

#### Abilities:

- 1. analyze historical phenomena, understand and differentiate their causes, occasion, consequence,
- 2. be able to verbally present on a map the place and position of a particular country/state, its neighboring countries
- 3. to distinguish the patterns of the process of gradual development of human society and general tendencies,
- 4. consider the role of the individual and the impact of activity on the course of history,
- 5. consider the turning points of history, events, social life and customs, the relationship between individuals, societies and civilizations from the perspective of a person, a nation and humanity,
- 6. evaluate the need to popularize, preserve, develop and transmit national and world cultural values.

#### Possession:

- 1. Be able to understand the degree of reliability of the information provided by historical sources, work with historical literature, lecture summaries, as well as work with the theoretical part of practical training,
- 2. be able to discuss various connections with the modern world, in the context of modern geopolitical developments, alternatives of outline relations and historical developments, make predictions about their results and consequences,
- 3. explain the peculiarities of each of the successive stages of society and the most characteristic features,
- 4. to work with historical and political maps,
- 5. to find connections in modern and historical processes, to show the connection of its and generations in history, the need for valuable and substantiated historical experience and acquisition of achievements, learning lessons and passing on to the next generations,
- 6. use maps, auxiliary literature, various teaching aids, ability to study abroad, combine different tools, do design or research work together with others, propose problems, present solutions, present solutions,
- 7. gather the necessary information from different sources, determine the credibility of the source of the description, express and substantiate one's own positions and views, make references while using the sources.

### 2. BRIEF CONTENT OF THE COURSE

The "History of Armenia" course covers the history of the Armenian people from ancient times to the present day. The course gives students the opportunity to get acquainted with the history of our country, rich in events and cultural achievements, to get to know the traditions, manners and customs of our people.

### 3. GOAL AND OBJECTIVES OF THE COURSE

### 3.1. The goal of the course

To introduce the students with the ancient millennial history of Armenia, to show that the Armenian people was one of the main and active participants in the formation of world civilization and has made a certain contribution to the treasury of universal culture.

### 3.2. Course objectives

- To give the minimum necessary knowledge from the history of the Armenian people,
- Introduce the history of the Armenian people by providing a connection with the relevant events in the history of the world

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- **K1**. The place of Armenia and its neighboring countries on the map, the existing legends about the ethnic origin of the Armenian people, the first pan-Armenian events in the history of the Kingdom of Van, the kings and their manuals.
- **K2**. About the Armenian kings of Yervanduni and Artashesyan dynasty, their undertakings in strengthening the Armenian statehood, the Armenian-Marakan, Armenian-Iranian, Armenian-Roman relations, the external and internal causes and the consequences of the fall of the kingdoms.
- **K3**. The process of the settlement of the Arshakunyats dynasty in Armenia, the importance of the adoption of Christianity as a state religion, the turn of the Armenian culture to the Christian world, the creation of the Armenian alphabet and the Armenian golden age of the 5th century, the causes and consequences of the decline of statehood.

- **K4**. Armenian liberation movements in the 5th century, the Persian-Byzantine division of Armenia, the Arab invasions and the anti-Arab uprisings of the Armenians, the Armenian epic, the preconditions for the restoration of the new statehood.
- **K5.** The restoration of statehood led by the Bagratuni dynasty, the manuals of the Bagratuni kings, the Armenian-Arab, Armenian-Byzantine relations, the location of Cilicia, the establishment and decline of the Armenian statehood there.
- **K6**. Armenian liberation movements in the 16th-18th centuries, the activities of Israel Oru, Hovsep Emin, Russian-Armenian-Indian centers. The international situation of the 19th century: the Russian-Persian, Russian-Turkish wars and the situation in Armenia, the internationalization of the Armenian question, the activities of the Armenian political parties, the liberation struggle against the Abdulhamid regime at the end of the 19th century.
- **K7.** The Armenian liberation movement at the beginning of the 20th century. Russia's policy on the Armenian issue. The Young Turk Revolution. The Armenian Issue in 1912-1914, the First World War and The Armenian Genocide, the Russian Revolutions in 1917, the May Heroic Battles and the Proclamation of the First Republic of Armenia.
- **K8.** The fall of the First Republic. Establishment of Soviet rule in Armenia, territorial issues of the USSR, Russian-Turkish 1921. The impact of the treaties on Armenian history, the participation of the Armenian people in World War II, the beginning and development of the Artsakh movement in 1988-1991. Proclamation of RA and NKR. Azerbaijan's anti-Armenian aggression, the further course of the Artsakh war in 1991-1994. The current status of the issue. Homeland-Diaspora relations in 1920-1990.

#### Be able to:

- **A1.** to differentiate the stages of development of the Armenian society and state, to understand the causes and consequences of the most important historical events,
- **A2.** use sources, analyze the information provided by them and draw conclusions,
- **A3.** to express his/her thoughts orally, in writing, by presenting slides, to form his/her own opinion on historical events, to present facts, other evidence to confirm his/her opinion,
- **A4.** to use educational, scientific, popular literature or the Internet.

#### Possess:

- **P1.** The key facts of Armenian history and their chronology,
- **P2.** the ability to express his / her thoughts on historical events and to express an opinion,
- P3. skills in analyzing the causes of historical events and assessing their consequences,
- P4. skills in understanding current political processes.

- 1. Chair material
- 2. Մ. Գևորգյանի դասախոսությունների փաթեթը։
- 3. Հայոց պատմություն, խմբ.՝ Հր. Սիմոնյան, Եր., 2012
- 4. www.armin.am/historyofarmenia/images/menus/728/HJP.pdf:
- 5. Ժամկոչյան Հ., Մելիք-Բախշյան, Հայ ժողովրդի պատմություն, Եր. 1975,\
- 6. <a href="http://www.armin.am/historyofarmenia/images/menus/904/Jamkochyan.pdf">http://www.armin.am/historyofarmenia/images/menus/904/Jamkochyan.pdf</a>:
- 7. Խուրշուդյան Լ., Հայկական հարցր, Եր., 1995,
- 8. www.armin.am/historyofarmenia/images/menus/273/Haykakan%20harc.pdf:
- 9. Մինասյան Է., Հայաստանի երրորդ հանրապետության պատմություն, Եր., 2013 <a href="http://www.armin.am/historyofarmenia/images/menus/1205/hayastani\_errord\_hanr.pdf">http://www.armin.am/historyofarmenia/images/menus/1205/hayastani\_errord\_hanr.pdf</a>:
- 10. Հայ ժողովրդի պատմության քրեստոմատիա, Երևան, 2007-

- 11. www.armin.am/historyofarmenia/images/menus/373/Qristomatia1.pdf:
- 12. Հարությունյան Կ, Հայ ժողովրդի մասնակցությունը 2-րդ աշխարամարտին, Երևան, 2001
- 13. www.armin.am/historyofarmenia/images/menus/286/HH\_Simon%20Vracyan.pdf
- 14. http://www.armin.am/historyofarmenia/images/menus/1250/Harutyunyan\_K2.pdf:
- 15. Սարգսյան Ե. Ղ., Թուրքիան և նրա նվաձողական քաղաքականությունը Անդրկովկասում 1914-1918 թթ., Երևան, 1964 www.armin.am/historyofarmenia/images/menus/278/Turqian%20ev%20nra%20Nvachoxakan%20q axaqakanutyun@%20Andrrkovkasum.pdf:
- 16. Սիմոնյան Հր. Ռ., Ազատագրական պայքարի ուղիներում, գիրք Ա-Բ, Երևան, 2009
- 17. http://www.armin.am/historyofarmenia/images/menus/775/Hrachik%20Simonyan.pdf
- 18. Վրացյան U., Հայաստանի Հանրապետություն, Երևան, 1993
- 19. www.armin.am/historyofarmenia/images/menus/286/HH\_Simon%20Vracyan.pdf:

6. ASSESSMENT COMPONENT	POINT					
Attendances	16					
Assessment of knowledge acquis	ition, abilities and skills		70			
Independent individual work			14			
7. ASSESSMENT SYSTEM /RAT	ING / SYSTEM					
Mark	Assessment Point	Assessmen	t letter			
"Excellent"	96-100	A+				
	90-95					
"Good"	." 80-89 B+					
"Satisfactory"	"Satisfactory" 60-69 C+					
"Unsatisfactory"	50 and below	D				
"Tested"	"Tested" ≥51 S					
"Untested"	"Untested" < 51 U					

NAME OF THE COURSE	GENERAL PSYCHO	LOGY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	II SEMESTER III					
ACADEMIC YEAR	2020-2021					

CREATOR	PhD Anna Ovchyan, PhD, Associate Professor Mariana
	Avetisyan
TELEPHONE	+374 93 10 88 78, +374 94 60 94 96
E-MAIL	aovchyan@inbox.ru, mariana avetisyan@yahoo.com,

CHAIR	Social Medicine
CLINICAL BASE	-
HEAD OF THE CHAIR	PhD Anna Ovchyan

Year	Semester	Credit	Academic week	Weekly hour	Total hours	Total class. hour	Lectures hour	Pract. Lab. hous	Individual work hour	Lecturers' consultation.	Examination	Test
II	III	3	17	3	90	51	34	17	25	14		+
Total		3	17	3	90	51	34	17	25	14		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 1. About the activity of human organs, organ systems, nervous system.
- 2. About the relationship between society and the individual.

### **Abilities**

1. To work with educational literature, lectures, as well as to master the ability to apply theoretical material in practical classes.

### 2. BRIEF CONTENT OF THE COURSE

General psychology studies the human psyche, mental processes and states, personality traits, consciousness, as well as how cognitive processes are formed and formed: senses, perception, memory, thinking, language, speech. temperament, character, abilities, motivation, emotions and attention.

### 3. GOAL AND OBJECTIVES OF THE COURSE

### 3.1. The goal of the course

- 1. Explain the role of psychological science.
- 2. Explain the psycho-physiological mechanisms and patterns of cognitive processes, mental states.
- 3. Explain the role of social and biological activities in the development of a person.

### 3.2 Course objective

1. Developing knowledge of the theoretical foundations of psychological science.

- 2. Acquisition of knowledge of cognitive processes, mental states, mechanisms of development of personal qualities, patterns.
- 3. Development of the ability to present theoretical and practical knowledge orally and in writing.
- 4. Development of the ability to work independently, to apply psychological knowledge in practice.

### 4.EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- K1. Subject, problems and methods of studying psychology.
- K2. The connection of the psyche with the activity of the nervous system. Mental processes and states.
- K3. Psychological characteristics of a person and their manifestations.

#### Be able to:

- A1. Describe and explain the patterns and mechanisms of mental processes, phenomena.
- A2. Apply psychological knowledge when making a psychological analysis of a case or situation.
- A3. To study and analyze psychological scientific literature.

#### Posses:

P1. Means of psychological self-regulation and self-development.

### 5. LITERATURE

- 1. Chair material
- 2. Հոգեբանության հիմունքներ, Ա. Նալչաջյան, 2016, 672 էջ
- 3. Психология, Немов Р.С., 4 изд., М.: Гуманит. Изд. центр Владос, 2003, 693 стр.
- 4. Рубинштейн С.Л.,Основы общей психологии, Изд. центр Питер, 2002, 720 стр.
- 5. Introduction to psychology, James W. Kalat, North Carolina State University, 9-th ed., 2008, 714 p.
- 6. Psychology / Henry Gleitman, James Gross, Daniel Reisberg, 8-th ed. 2011, 896 p.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	MEDICAL PSYCHO	MEDICAL PSYCHOLOGY					
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor	Doctor					
FACULTY	General Medicine						
COURSE	II SEMESTER IV						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Anna Ovchyan, PhD, Associate Professor Mariana				
	Avetisyan, PhD Anna Chilingaryan				
PHONE	+374 93 10 88 78, +374 94 60 94 96, +374 98 26 26 90				
E-MAIL	aovchyan@inbox.ru, mariana avetisyan@yahoo.com,				
	ani70march@mail.ru				

CHAIR	Social Medicine
CLINICAL BASE	-
HEAD OF THE CHAIR	PhD Anna Ovchyan

Year	Semester	Credit	Academic week	Weekly hour	Total hours	Total class. hour	Lectures hour	Pract. Lab. hous	Individual work hour	Lecturers' consultation	Examination	Test
II	IV	3	15	4	90	60	34	26	20	10		+
Total		3	15	4	60	60	34	26	20	10		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 1. About the structure of human organs, organ systems, nervous system.
- 2. About the connection between the nervous system and the psyche.
- 3. About the cognitive processes of the psyche.
- 4. The psychological structure of a person.

#### Abilities:

- 1. Explain the physiological mechanisms of mental activity.
- 2. Recognizing and developing the role of cognitive processes for human life and activity.
- 3. Recognizing and differentiating the psychological characteristics of a person and their manifestations.

### Possessions:

1. Work with psychological literature, lecture summaries, theoretical part of practical lessons.

### 2. BRIEF CONTENT OF THE COURSE

The subject "Medical Psychology" studies the theoretical and practical aspects of medicine related to psychology, the problems of mental health of a person arising during the prevention, diagnosis and

### 3. GOAL AND OBJECTIVES OF THE COURSE

### 3.1. The goal of the course

- 1. Behave in accordance with the norms and rules of professional ethics.
- 2. Distinguish the norm and pathology of the human psyche.
- 3. Explain the causal links between mental and physical disorders.
- 4. Explain the impact of the disease on a person's social adaptation, ability to work, mental health.

### 3.2. Course objective

- 1. Development of professional behavior and communicational skills based on medical ethical norms.
- 2. Development of knowledge of practical causes of causal disorders of psycho-physical disorders, adequate to theoretical knowledge.
- 3. Manifestations of the human psyche the development of the ability to recognize the disease, to recognize it during treatment.
- 4. Development of knowledge of the causal links of possible developmental disorders.
- 5. Development of the ability to recognize and describe personal, behavioral, anxiety and mood disorders.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- **K1**. Psychological aspects of a doctor's professional activity, principles of medical deontology.
- **K2.** The interconnectedness of human mental and physical health, cause-and-effect relationships.
- **K3.** The norm and pathology of human's mental activity.

### Be able to:

- A1. Distinguish and analyze the norm of mental activity: pathology.
- **A2**. Apply knowledge on the interaction of human mental and physical health in professional analysis of clinical cases.
- A3. Recognize developmental deviations and develop an appropriate case strategy.
- **A4.** Be able to assess problematic situations, develop an adequate strategy, express one's position based on psychological principles.

### Possess:

- **P1.** Ability to analyze clinical cases.
- **P2.** Means of psychological self-regulation and self-development.

- 1. Chair material
- 2. Բժշկական հոգեբանություն, ուսումնական ձեռնարկ, ԵՊՀ, 341 էջ
- 3. Прикладная клиническая психология: учебное пособие, В.А. Кулганов, В.Г. Белов, Ю.А. Парфёнов, СПб.: СПбГИПСР, 2012, 444 с.
- 4. Психосоматика и психология здоровья: Учеб. пособие. 2-е изд., перераб. и доп., Ю.Г. Фролова, Мн.: ЕГУ, 2003, 172 с.
- 5. Первичная профилактика психосоматических заболеваний с помощью системы психологических технологий, И. А. Фурманов [и др.]; под ред. И. А. Фурманова, М-во образования РБ, Гом. гос. ун-т им. Ф. Скорины. Гомель: ГГУ им. Ф. Скорины, 2015, 221 с.
- 6. Биоэтика: учебник и практикум для вузов / Е. В. Ушаков, М.: Издательство Юрайт, 2016,

306 c.

- 7. The Oxford Handbook of Clinical Psychology, David H. Barlow, Oxford University Press, 2014, 977 p.
- 8. Clinical Psychology, Eighth Edition Timothy J. Trull and Mitchell J. Prinstein, University of Missouri–Columbia, University of North Carolina, 609 p.
- 9. Abnormal psychology, second edition, Deborah C. Beidel, Cynthia M. Bulik, Melinda A. Stanley, University of Central Florida, University of North Carolina, Baylor College of Medicine, 212, 678 p.
- 10. Health psychology, Arthur M. Nezu, Christine Maguth, Nezu Pamela A. Geller, Irving B. Weiner, John Wiley & Sons Inc., 2003, 691 p.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent Individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	В+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	PHILOSOPHY	PHILOSOPHY					
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND	INTEGRATED EDUC	CATIONAL				
	PROGRAM						
THE FORM OF TRAINING	Full time	Full time					
PROFESSION	Doctor	Doctor					
FACULTY	General Medicine	General Medicine					
COURSE	II	Semester	III				
ACADEMIC YEAR	2020-2021						

AUTHOR	Hayarpi Sahakyan, Gevorg Hakobyan			
PHONE	+374 94 69 24 64, +374 94 50 33 55			
E-MAIL	hayarpisahakyan@yandex.ru, gevorg.hakobyan82@gmail.com			

CHAIR	Humanitarian subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Tatevik S. Karapetyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
II	III	3	17	3	90	51	34	17	26	13		+
Total		3	17	3	90	51	34	17	26	13		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 2. regarding important and significant events in world history,
- 3. language skills at the level of reading, reproducing, listening to a lecture and understanding,
- 4. knowledge of fundamental theories in natural and mathematical disciplines.

#### **Abilities:**

- 4. analyze historical and biological phenomena, patterns of natural and social processes,
- 5. solve mathematical and scientific problems,
- 6. explain significant historical events and their possible effects on the person and society.

#### Possessions:

- 7. be able to listen, read and understand, interpret and reinterpret the academic materials presented in lectures and professional literature,
- 8. under the teacher's guidance, to compare existing and acquired knowledge, connect them in a logical order, make conclusions, justify the conclusions made,
- 9. value existing and acquired knowledge, to see the gaps that exist in the absence of philosophical knowledge.

### 2. BRIEF CONTENT OF THE COURSE

The course "Philosophy" examines the features of philosophical knowledge, the main problem of philosophy, the stages of development, the main problems of the main sections, the main views on the latter.

### 3. GOAL AND OBJECTIVES OF THE COURSE

### 3.1 The goal of the course

The goal of the course is to acquaint the student with the role of philosophy in culture, the historical stages of its development, and the main points of view proposed around the main philosophical issues.

### 3.2 Course objective

- Demarcation of existence, knowledge, method, scientific and non-scientific knowledge.
- Improve the ability to read universal and interrelated issues of public, legal, political, economic spheres,
- Practically strengthen the knowledge of the grammar of the language.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1. characteristics of philosophical knowledge,
- **K2**. the main sections of philosophy and the boundaries of their problem area,
- **K3**. the main problems of philosophy, the main points of view regarding them,
- **K4**. the stages of the development of philosophy, the main schools, directions, branches,
- **K5.** the main ideas of the most significant figures of world philosophy.

#### Be able to:

- **A1.** take a philosophical approach to any point of view;
- **A2.** distinguish the main philosophical trends, problems, solutions.
- **A3**. to apply the opportunities provided by philosophy in life and professional activities.

### Possess:

- **P1**. to the philosophical problem.
- **P2**. philosophical-methodological skills.
- P3. as a result of philosophical analysis, draw conclusions, value them and justify them.

### 5. LITERATURE

- 1. Chair material.
- 2. Solomon R.C., Higgins K.M., The Big Questions. A Short Introduction to Philosophy. Ninth Edition, Wadsworth, Cengage Learning, 2014
- 3. Ասատրյան Վ. Մ., Փիլիսոփայության ներածություն (ուսումնական ձեռնարկ), Եր, նոյան Տապան, 2001
- 4. Фролов И. Т. и др Введение в философию: Учеб. пособие для вузов, 3-е изд., перераб. и доп. М.: Республика, 2003

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	MATHEMATICS AND MEDICAL INFORMATICS					
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	I SEMESTER I, II					
ACADEMIC YEAR	2020-2021					

CREATOR	Lia Martirosyan	
	PhD Armen Grigoryan	
PHONE	+374 55 43 33 56, +374 55 31 35 45	
E-MAIL	lia.mart70@gmail.com, armeng9@gmail.com	

CHAIR	Natural Sciences
CLINICAL BASE	-
HEAD OF THE CHAIR	PhD Hayarpi Javrushyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
т	I	3	17	3	90	51	18	33	21	18		+
1	II	2	17	2	60	34	16	18	17	9		+
Total		5	34	5	150	85	34	51	38	27		·

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- 1. linear, square equations,
- 2. algebraic formulas,
- 3. alterations of algebraic expressions,
- 4. elementary functions,
- 5. basic concepts of function boundaries, derivatives
- 6. trigonometric functions, formulas,
- 7. basic computer and "MS Office" skills,

### **Abilities:**

- 1. distinguish between dependent and independent variables, types of elementary functions,
- 2. make alterations of algebraic expressions,
- 3. apply trigonometric formulas,

- 4. construct graphs of elementary functions,
- 5. to work with "MS office" programs and with the Internet;

### Possessions:

- 1. use various sources to get the necessary information, work with professional literature,
- 2. work in a team, maintaining the norms of professional ethics, guided by national and universal values.

### 2. BRIEF CONTENT OF THE COURSE

It is impossible to study other sciences without "Mathematics". The ideas, judgments and logic of mathematics serve as a language for the other sciences since they write, speak and think with it. It studies and explains the patterns of difficult phenomena with great accuracy. The course proceeds to survey ways in which mathematics provides a tool for understanding and dealing with various aspects of present-day living, such as managing personal finances, security. It is used to analyze phenomena in nature that has plentiful life and health sciences applications and that provides students with the knowledge and skills necessary to analyze and interpret mathematical models of a diverse array of phenomena in the living world.

"Medical Informatics" helps to develop computer knowledge for the application-mastery of modern technologies, receiving and processing information, including in the field of healthcare.

#### 3. GOAL OF THE COURSE

The goal of the course is to give students basic knowlage to understand the foundations of mathematical concepts to develop skills needed to study and master other subjects, to solve practical problems encountered during professional activities, to introduce students the set of real numbers, the limit of a function, continuity, derivative and differential, theory of differential calculus and their practical use. The course should give students the necessary knowledge for using the modern technologies in the Medicine and Health care to provide quick and accurate computation and manipulation, to enhance conceptual understanding and to facilitate higher order thinking.

### **4.** EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- K1. general concepts of functions and its applications.
- K2. how to define the basic concepts of derivative, differential, the limit and continuity
- K3. basic integration methods, methods for solving 1st and 2nd order differential equations,
- K4. about security softwares, drivers, technologies to provide quick and accurate computation and manipulation

### Be able to:

- A1. apply theoretical knowledge in medicine to solve practical problems,
- A2. use educational, scientific, popular literature and the Internet for professional activities,
- A3. create medical databases, presentations, exhibitions,
- A4. Compile professional surveys.

### Possess:

- P1. work team, the ability of solving professional problems, building, researching and analyzing graphs of functions.
  - P2. how to find, download, and use professional applications and templates,
  - P3. the ability of conducting professional research and surveys,
  - P4. MS Office programs.

### 5. LITERATURE

- 1. Chair material
- 2. Claudia Neuhauser, "Calculus for Biology and Medicine", Published by Pearson, United States (2011)
- 3. L.D. Hoffmann, G.L. Bradley, "Calculus For Business, Economics, and the Social and Life Sciences", Published by McGraw-Hill, New York 2010, 10<sup>th</sup> Edition.
- 4. S. Calaway, D. Hoffman, D. Lippman, "Business Calculus", USA, 2013.
- 5. Ս. Հարությունյան, «Բարձրագույն մաթեմատիկա», Երևան 2000
- 6. Ֆիխտենգոլց Գ.Մ. «Մաթեմատիկական անալիզի հիմունքներ»։ Հատոր 1։ Երևան։ «Լույս» հրատարակչություն, 1970.
- 7. <u>Stephen Moffat, The Mouse Training Company</u> " Word 2010 Advanced: Part I, Templates, Forms and Styles" 2014 Stephen Moffat, The Mouse Training Company.
- 8. <u>Stephen Moffat, The Mouse Training Company</u> " Excel 2010 Introduction: Part I Formulas, Functions and Formatting" 2011 Stephen Moffat,
- 9. Յու.Ս. Բաբայան, «Բարձրագույն մաթեմատիկա և ինֆորմատիկա։ Ուսումնական ձեռնարկ բուժական, ստոմատոլոգիական և դեղագիտական ֆակուլտետների ուսանողների համար». Երևան։ ԵՊԲՀ-ի հրատ., 2009։
- 10. Pert Mason "Windows 8.1" 1st edition, 2014 Pert Mason & Bookboon
- 11. Shelley Fishel 1st edition, Shelley Fishel & Bookboon "Powerpoint 2016"
- 12. Robert E. Hoyt MD FACP" Medical Informatics Practical Guide for the Healthcare Professional"

Third Edition, © 2009 Published by: Lulu.com

6. ASSESSMENT COMPONENTS	POINT
Attendance	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and less	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	MEDICAL PHYSICS					
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM					
THE FORM OF TRAINING	Full time	Full time				
PROFESSION	Doctor					
FACULTY	General Medicine	General Medicine				
COURSE	I	SEMESTER	II			
ACADEMIC YEAR	2020-2021					

CREATOR	PhD Armen Grigoryan			
	PhD, Professor, Asatour Lalayan			
PHONE	+374 55313545, +374 93 39 57 68			
E-MAIL	armeng9@gmail.com			
	alalayan@ysu.am			

CHAIR	Natural Sciences
CLINICAL BASE	-
HEAD OF CHAIR	PhD Hayarpi Javrushyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	II	3	17	3	90	51	24	27	25	14		+
Total		3	17	3	90	51	24	27	25	14		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### **Knowledge:**

- 1. About algebraic and simple differential equations, functions, graphs and derivatives of a functions.
- 2. Fundamentals of mechanics, motion and their characteristics, knowledge of atomic structure, charge and fields.
- 3. About the structure of the human body, organ systems.
- 4. About chemical compounds and bonds.

### **Abilities:**

- 1. Analyze physical phenomena, interpret physical quantities, their applicability, regularity of natural processes.
- 2. Solve algebraic-differential equations, compute the derivatives of elementary functions, interpret graphs of functions.
- 3. Explain the motion, the reasons for its occurrence, the regularity, the structure of the atom, its relationship to the formation of chemical compounds.3. make comparisons between the mother tongue and English,

### Possessions:

- 1. to be able to work with physics literature, lecture transcripts, as well as work with the theoretical part of practical classes.
- 2. to be able to independently set simple problems, draw up problem-solving schemes and solve the set problems.
- 3. to be able to work independently on the assigned topics, find relevant literature from the Internet and libraries, analyze it and present it properly.

### 2. BRIEF CONTENT OF THE COURSE

The "Medical Physics" course is aimed at forming systematic knowledge among medical students about the physical properties of biological systems, the physical processes taking place in them, which are necessary for the assimilation of other educational programs, as well as for the training of medical professionals.

### 3. GOAL OF THE COURSE

In the field of professional education, the teaching of the "Medical Physics" course aims to acquaint students with physical phenomena occurring in nature and biological systems, their main properties and patterns, as well as fundamental laws, to teach the application of physical methods in various types of professional and social activities, to form in students physical and analytical thinking.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know

- **K1**. The basic laws of nature,
- **K2**. The results of the study of phenomena resulting from interactions,
- **K3.** Physical phenomena in a living organism,
- **K4.** Correlation, interaction and combination of living and inanimate organisms,
- **K5**. The effect of physical phenomena on organisms,
- **K6.** The effect of physical fields on living organisms,

### Be Able to

- **A1.** Use educational, scientific, popular literature and the Internet for professional activities,
- **A2**. Use laboratory equipment,
- **A3**. Use centrifuge, perform audiometry,
- **A4.** Determinat of viscosity, viscometry, galvanization, electrophoresis, determination of tissue resistance (impedance), electrocardiography, study of medical biological information, magnetic biology.
- **A5.** perform interferometry, biometrics, thermography.
- **A6**. performe ctinometry, oxyhemometry, piezoelectric effect analizes, amplification of electrical signals, etc.
- **A7**. Analyze the physical phenomena and properties in biological systems and life processes, based on the elements of physicochemical biophysics.

### **Possess**

- **P1.** Skills of expressing objects and processes under study through diagrams.
- P2. Electrogram analysis skills.
- **P3.** Examination of all physical methods of treatment, use of medical equipment, physical measurements, their clarification, application of mathematical statistics in medicine, application of mathematical correlation dependencies in medicine, radiography, radiotherapy, physiotherapy, high-frequency electronic equipment, magnetic resonance imaging.

- 1. Chair material
- 2. Bidlack J.E., Jansky Sh. 2017. Introductory plant biology (Stern's introductory plant biology), 14th edition, New York, McGraw-Hill, 640 p.
- 3. Bone K., Mills S. 2013. Principles and Practice of Phytotherapy. Modern Herbal Medicine, 2nd ed., Edinburgh, London, New York, Oxford, Philadelphia, St Louis, Sydney, Toronto: Elsevier, 1051 p.
- 4. Ղանդիլյան Պ.Ա. 1981. Բույսերի որոշումը, հերբարիացումը և լատինական անվանումների արտասանության համառոտ կանոններ, Եր., 47 էջ։

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter						
"Excellent"	96-100	A+						
	90-95	A						
"Good"	80-89	B+						
	70-79	В						
"Satisfactory"	60-69	C+						
	51-59	С						
"Unsatisfactory"	50 and below	D						
"Tested"	≥51	S						
"Untested"	< 51	U						

NAME OF THE COURSE	GENERAL CHEMIST	ΓRY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM					
THE FORM OF TRAINING	Full-time	Full-time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine					
COURSE	I	SEMESTER	I			
ACADEMIC YEAR	2020-2021					

CREATOR	PhD, Associate Professor A.Grigoryan, B.Babayan.
TELEPHONE	+374 94 41 44 90, +374 93 15 04 88
E-MAIL	grigoryananna940@gmail.com, bbg.15.04@mail.ru

CHAIR	Natural Sciences
CLINICAL BASE	-
HEAD OF THE CHAIR	Hayarpi Javrushyan, PhD

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	Ι	4	17	4	120	68	34	34	34	12	6	
Total		4	17	4	120	68	34	34	34	12	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge.

- 1. Types of thermodynamic systems and the processes in them. The functions of the description of the stage of system: internal energy, enthalpy: The work and heat as energy transfer type.
- 2. Reversible and irreversible thermodynamic processes. Hess's law, heat effect of reaction by formation, combustion.
- 3. Hydrolysis of salts, the grade of hydrolysis and the factors which are affecting it, pH of hydrolysis: Indicators and the color changes due to changes of environment.
- 4. The speed of chemical reaction in constant temperature, homogenous and heterogeneous reactions.

### **Abilities:**

- 1. To explain the difference between the solutions and the dispersed systems. Le Chatelier's principle reversible reactions.
- 2. To analyze the chemical processes on a molecular level, to differentiate the strong and wick electrolytes.

3. To be able to operate with various equipment in the laboratory, due to the guides of environmental safety

### Possessions:

- 1. To operate with scientific literature
- 2. To calculate the molarity of a solution, mass and molar sections of dissolved compounds in solution

### 2. BRIEF CONTENT OF THE COURSE

General Chemistry" course includes the information about the chemical and physical properties of the most important inorganic and organic compounds, the main elements of the theory of chemical structure, a certain concept of chemical thermodynamics and chemical kinetics, theories of solutions, the lows of inorganic and organic synthesis processes, analytical principles of physicochemical properties of compounds.

### 3. GOAL OF THE COURSE

The main goal of the course is to form in students a certain concept of general principles of chemistry, chemical bond types and formation mechanisms, physical and chemical properties and the biological role of chemical elements.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- 1. The chemical equivalent of substance, mass equivalent, the definition of equivalence low.
- 2. Magnitude of equivalent, the formulas of chemical equivalents, definition for element, oxide, acid, base and salt.
- 3. Redox reaction, the concept of mas equivalent of oxidizer and reducer.
- 4. The concept of the low of equivalent and the formulas for the calculation of it. Mass, volume and mole section definition formulas
- 5. Non-electrolyte saturated vapor pressure, the boiling point elevation, freezing point depression, osmotic pressure calculation,
- 6. Ebullioscopy constant (E) and Cryoscopy constant (K) physical meaning, isotonic solutions of blood, the lows of gases desolvation in liquids (Henry, Dalton, Sechenov Low), the causes of decompression sickness.

#### Be able to:

- 1. To use scientific and educational, popular science literature and web resources of the internet for ensuring own professional actions.
- 2. To operate physical, chemical and biological equipment.
- 3. Henry and Sechenov lows and formulas for the calculation of ionic transport through the biomembranes.
- 4. To apply theoretical knowledge to practices, to do laboratory experiments with organic substances, to be able to make personal conclusions about the several scientific questions

#### Possess:

1. Recalculation of the molar mass of unknown substance, the osmotic pressure of the solution, lysis (hemolysis) plasmolysis phenomenon detection, and definition.

- 1. Chair material
- 2. Advanced Inorganic Chemistry. Third edition. USA. F. Albert Cotton.
- 3. Physical and Inorganic Chemistry. A. Bakac. 2010.
- 4. Попков В.А. Обшаяхимия:учебник-М.: ГЭОТАР-Медиа, 2007-2009

- 5. О.А. Реутов, А.Л. Курин, К.П. БутинОрганичес-кая химия Москва 2003 том 1, 2, 3, 4.
- 6. Основы аналитической химии. Общие вопросы. Методы разделения. М. 2002 книга 1 Методы химического анализа. М. 2002книга 2.
- 7. Мушкамбаров Н.Н. Физическая и коллоидная химия:учеб.-М.:ГЭОТАР-Медиа,2001.
- $\textbf{8.} \quad \underline{\text{https://www2.chemistry.msu.edu/faculty/reusch/virttxtjml/questions/problems.htm}}$

6. ASSESSMENT COMPONENTS	POINT				
Attendances	16				
Assessment of knowledge acquisi	70				
Independent individual work	14				
7. ASSESSMENT SYSTEM /RATING / SYSTEM					
Mark	Mark Assessment Point Assessme				

7. ASSESSMENT SYSTEM /RATING / SYSTEM							
Mark	Assessment Point	Assessment letter					
"Excellent"	96-100	A+					
	90-95	A					
"Good"	80-89	В+					
	70-79	В					
"Satisfactory"	60-69	C+					
	51-59	С					
"Unsatisfactory"	50 and less	D					
"Tested"	≥51	S					
"Untested"	< 51	U					

NAME OF THE COURSE	BIOORGANIC CHEM	MISTRY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	I	SEMESTER	II			
ACADEMIC YEAR	2020-2021					

CREATOR	PhD, associate professor A.Grigoryan, B.Babayan.
PHONE	+374 94 41 44 90, +374 93 15 04 88
E-MAIL	grigoryananna940@gmail.com, bbg.15.04@mail.ru

CHAIR	Natural Sciences
CLINICAL BASE	-
HEAD OF THE CHAIR	PhD Hayarpi Javrushyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	II	4	17	4	120	68	34	34	34	12	6	
Total		4	17	4	120	68	34	34	34	12	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### **Knowledge**:

- 1. The basic classification of organic substances, substituents based and rational nomenclature, optical isomerism, the structure and properties of organic substances, the features of bioorganic processes.
- 2. The primary knowledge of organic compounds; the structure, properties of bases, spirits, ethers, aminoacids, proteins, lipids, carbohydrates, and their function for the organism.
- 3. Physicochemical processes in living organisms, redox reactions, thermal effects of chemical processes.
- 4. The properties and the kinetics of enzymes, as catalysts of organic reactions of living organisms.

### Abilities:

- 1. To explain the bioorganic processes of living organisms.
- 2. To analyze the causal relationships of bioorganic processes of living organisms
- 3. To be able to operate with various equipment in the laboratory, due to the guides of environmental safety

### Possessions:

- 1. To explore and use Scientific-educational literature
- 2. Qualitative analyses, definition and precipitation reactions, ketones and aldehyde detection reactions, aminoacid detection:

## 2. BRIEF CONTENT OF THE COURSE

The course of "Bioorganic Chemistry" includes the knowledge about chemical properties of organic substances, the most important classes of biomolecules and biopolymers, as a base for further study of bioorganic processes of living organisms on a molecular level.

### 3. GOAL OF THE COURSE

The main goal of course is to study the chemical properties of the main classes of biologically important organic compounds biomolecules and biopolymers, as a base for further study of bioorganic processes of living organisms on a molecular level.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- 1. The guides of safety in physical, chemical, biological laboratories during the operations with reactors, equipment, animals.
- 2. The physicochemical character of processes in living organisms on levels of molecules, cells, tissues and organs.
- 3. The main metabolic pathways of Alcohol, ethers, ketones, organic acids, amino acids, pyrimidine bases, the role of main electron transport systems for metabolism.
- 4. The structure and the functions of the most important bioorganic compounds (lipids, natural proteins, vitamins, carbohydrates, etc.)
- 5. The participation of ketone bodies in biochemical processes of transpiration (gazes exchange, respiration) and pH balance maintenance.

#### Be able to:

- 1. To use scientific and educational, popular science literature, internet web resources for ensuring professional activity.
- 2. To operate physical, chemical and biological equipment.
- 3. To diferencate oxi acids: mallic acid, lactic acid: oxo acids: pyruvic acid, ketoenolic tautomerism, cadaveric substances formation, non-essential aminoacids transamination reactions:
- 4. To use the theoretical knowledge, to do laboratory experiments with organic substances, to be able to make personal conclusions about the several scientific questions

### Possess:

1. Structure, properties, reaction activity and obtaining methods of hydrocarbons and their functional derivatives.

- 1. Chair material
- 2. Бендер М., Бергерон Р., Комияма М. <u>Биоорганическая химия ферментативного катализа.</u> Пер. с англ. М.: Мир, 1987. 352 с.

- 3. Дюга Г., Пенни К. Биоорганическая химия. М.: Мир, 1983.
- 4. Органическая химия: учебник/В.Л. Белобородов, С.Э. Зурабян, А.П.Лузин, Н.А. Тюкавкина; Под ред.Н.А.Тюкавкиной.-М.:Дрофа. Кн.1:Основной курс.-2002.-640с.-(Высшее образование: Современный учебник).
- 5. Органическая химия: учебник /ред. Н. А. Тюкавкина. М.: Дрофа. Кн. 2: специальный курс. 2008. 592 с. (Высшее образование: Современный учебник).
- 6. Органическая химия:учебник/В.Л. Белобородов, С.Э. Зурабян, А.П.Лузин, Н.А. Тюкавкина; Под ред.Н.А.Тюкавкиной.-М.:Дрофа. Кн.1:Основной курс.-2003.-640с.- (Высшее образование: Современный учебник).
- 7. Тюкавкина Н.А. Рукаводство к лабораторным занятиям по органической химии: Учеб.пособие/Н.А.Тюкавкина.-2-е изд.,перераб. и доп.-М.:Дрофа, 2002.-384с.:ил.-(Высшее образование: Современный учебник).
- 8. INTRODUCTION TO General, Organic, and Biochemistry NINTH EDITION Frederick A. Bettelheim William H. Brown, Mary K. Campbell, Shawn O. Farrell 967p., 2010.
- 9. Organic Chemistry SIXTH EDITION Robert Thornton Morrison, Robert Neilson Boyd, 1283p, 2002.
- 10. Biochemistry U Satyanarayana, U Chakrapani 794p., 2007.

6. ASSESSMENT COMPONENTS	POINT
Attendance	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	В+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and less	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	BIOCHEMISTRY						
TYPE OF COURSE	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	II Semester III, IV						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Hayarpi Javrushyan
	PhD, associate professor Varduhi Hovsepyan
PHONE	+374 93 78 92 69, +374 94 93 67 80
E-MAIL	hg.javrushyan@ysu.am, varduhi.hovsepyan.sargsyan@gmail.com

CHAIR	Natural Sciences
CLINICAL BASE	-
HEAD OF CHAIR	PhD Hayarpi Javrushyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
тт	III	5	17	5	150	85	30	55	42	23		+
II	IV	3	15	3	90	45	18	27	32	7	6	
Total		8	32	8	240	130	48	82	74	30	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### **Knowledge:**

- 1. About the main groups of chemical elements, inorganic and organic substances, their structure, properties and functions. Peculiarities of application of the laws of thermodynamics in biological systems.
- 2. Basic knowledge of the macromolecules of the cell: structure, properties, biological role of proteins, lipids, carbohydrates, nucleic acids. Basic knowledge about the most important processes in the cell, such as replication, transcription, translation, etc.
- 3. Cell biology of living organisms, physicochemical processes in them, cell structure, function, development and evolution.
- 4. Cellular, tissue, organ, organ systems and structural levels of the whole organism. Properties and kinetics of enzymes that catalyze chemical reactions in biological systems.

### Abilities:

- 1. Explain the various vital processes in living organisms at the cellular level.
- 2. Analyze biological phenomena, causal links of patterns of natural processes.
- 3. Work with different equipment in the laboratory, ensuring the safety of himself and environment.

### **Possessions**

- 1. Study and work with scientific-educational literature.
- 2. Preparation of different percentage and molar solutions and buffers, use them in biological research, weighing, centrifugation, incubation, pH and optical density measurement.

### 2. BRIEF CONTENT OF THE COURSE

The subject of "Biochemistry" provides students with fundamental knowledge about monosaccharides, oligosarcharides, homo- and heteropolysaccharides, carbohydrates, proteins, amino acids, enzymes, lipids, heme, nucleic acids, vitamins, biological membranes, cellular signals. The course also includes biochemistry of liver, muscle tissue and nerve tissue. Biochemistry of oral cavity, composition of saliva, enzymes, their activity, mineralization, organic and inorganic elements, dentine, enamel, dental plaque, protein composition, structural features of collagen, elastin, amino acid composition, biosynthesis and maturation.

### 3. GOAL OF THE COURSE

The main goal of the "Biochemistry" course is to give students basic systemic knowledge about the structure, function, molecular mechanisms of the most biologically important chemical compounds in the cell. To give the student a complete picture of the metabolism, the biochemical principles of its regulation, as well as to teach the molecular mechanisms of development of various pathological processes, the biochemical bases of disease prevention and treatment.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- K1. Rules of safety technique when working with reagents, equipment, animals in physical, chemical, biological laboratories.
- K2. The physicochemical nature of the processes that take place in living organisms at the molecular, cellular, tissue and organ levels.
- K3. The main metabolic pathways of carbohydrates, fats, amino acids, purine-pyrimidine bases, the role of cell membranes and their transport systems in metabolism.
- K4. Structure and function of the most important chemical compounds (nucleic acids, natural proteins, water-soluble and fat-soluble vitamins, hormones, etc.)
- K5. The structure of hemoglobin and biological role, its participation in gas exchange, maintaining the balance of the acid-base of the environment.

#### Be able to:

- A1. Use scientific, educational, popular science literature, use the Internet to develop professional activities.
- A2. Use chemical, physical and biological equipment
- A3. Distinguish normal levels of metabolites (glucose, urine, bilirubin, uric acid, lactic acid, pyrochloric acid, etc.) from pathological changes, read a proteinogram, explain the reasons for the differences.
- A4. Develop data on serum enzyme testing.

#### Possess:

### P1. Preliminary diagnostic skills based on biochemical research in human biological fluids.

### 5. LITERATURE

- 1. Chair material
- 2. Marks' basic medical biochemistry: a clinical approach /Michael Lieberman, Alisa Peet 2018
- 3. Lehninger Principles of Biochemistry, Fourth Edition David L. Nelson, Michael M. Cox, 2009
- 4. Ամբիոնական մշակումներ։
- 5. Marks' Basic Medical Biochemistry A Clinical Approach, 2nd Edition Colleen Smith, 2012
- 6. Jeremy M Berg, John L Tymoczko, and Lubert Stryer, Biochemistry, New York: <u>W H</u> Freeman; 2002.
- 7. Harvey Lodish, Arnold Berk, S Lawrence Zipursky, Paul Matsudaira, David Baltimore, and James Darnell., Molecular cell biology, Fifth Edition, 2000
- 8. Березов Т.Т., Коровкин Б.Ф., Биологическая Химия, 2008
- 9. Գ.Ս.Խաչատրյան, Մ.Ի.Աղաջանով, «Կենսաքիմիա», Եր.,ԵՊԲՀ, 2001թ.
- 10. "Биохимические основы патологических процессов" / Под ред. Е.С.Северина. М: Медицина, 2000
- 11. Марри Р., Греннер Д., Мейес П., Родуэлли В. "Биохимия человека" В 2-х томах. М.: Мир, 1993, 415с.
- 12. Цыганенко А.Я., Жуков В.И., Мясоедов В.В., Завгородний И.В. "Клиническая биохимия", М.: Триада-Х, 2002
- 13. http://www.booksmed.com
- 14. <a href="http://pubmed.gov">http://pubmed.gov</a>
- 15. <a href="http://www3.interscience.wiley.com/cgibin/">http://www3.interscience.wiley.com/cgibin/</a>
- 16. <a href="https://www.springer.com/gp/">https://www.springer.com/gp/</a>
- 17. <a href="https://www.elsevier.com/">https://www.elsevier.com/</a>
- 18. <a href="https://www.nature.com/">https://www.nature.com/</a>

6. ASSESSMENT COMPONENTS				
Attendances	16			
Assessment of knowledge acquisition, abilities and skills	70			
Independent individual work	14			

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	BIOLOGY							
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM	PROGRAM						
THE FORM OF TRAINING	Full-time	Full-time						
PROFESSION	Doctor	Doctor						
FACULTY	General Medicine	General Medicine						
COURSE	I	I SEMESTER I, II						
ACADEMIC YEAR	2020-2021							

CREATOR	PhD, Associate Prof. Inga Bazukyan
	PhD Gohar Arajyan
PHONE	+374 96933452, +374 93 39 96 68
E-MAIL	bazukyan@ysu.am, arajyankens@mail.com

CHAIR	Medical – Biological subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Naira Hunanyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	I	5	17	5	150	85	22	63	41	18	6	
	II	4	17	4	120	68	18	50	34	12	6	
Total		9	34	9	270	153	40	113	75	30	12	

1.PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 5. life and living organisms, their physical and chemical structure, functions, development and evolution,
- 6. chemical elements, cations and anions, the main groups of inorganic and organic substances, their structure, properties and functions,
- 7. structural levels of cellular, tissue, organs, organ systems and the whole organism of living organisms,
- 8. systematic approach that will allow understanding the integrity and integration of individual structural and functional units of the body at each studied level of organization of living organisms. Human ontogeny. Features of oogenesis and spermatogenesis in humans.

### Abilities:

- 7. to analyze biological phenomena and regularities of natural processes,
- 8. to make synthesis and degradation reactions.

### Possessions:

1. be able to work with casts, skeletons and preparations of animals, work with biological

literature, lecture notes, as well as work with the theoretical part of practical classes.

### 2. BRIEF CONTENT OF THE COURSE

The course "Biology" is studied for two semesters: In the first semester, the issues of general biology are considered: the purpose and objectives of the subject are presented, the levels of organization of living matter, the properties of living systems are explained. Cell biology, reproduction of living organisms, rules of heredity, variability of pathways and mechanisms are described in detail. In the second semester, the student gets acquainted with the individual development of organisms, learns the patterns and mechanisms of ontogenesis, modern evolutionary theories, the role of the population, factors of evolution. The stages of anthropogenesis, the impact of ecology on development will be considered. The main problems of parasitism will be summed up.

### 3. GOAL OF THE COURSE

The main goal of the Biology course is to provide students with basic knowledge in the field of cell biology, genetics, developmental biology, micro- and macro-evolution, anthropogenesis, general biology, parasitology and human ecology.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1- Theory of biological systems, their organization, molecular mechanisms of processes in norm and pathology.
- K2- Cellular structure of living organisms, evolutionary hypotheses of the origin of cell membrane components, molecular mechanisms of transport, intercellular interactions, modification of energy in the cell.
- K3 Principles of regulation of gene expression, mechanisms and processes of use, transmission, storage of biological information in the cell.
- K4 Structural and functional organization of genetic material, features of the genome of eukaryotic and prokaryotic organisms, organization of the human genome.
- K5 Cytological bases of various forms of reproduction of organisms.
- K6- New approaches to the treatment of human diseases, gene and cell therapy. Methods of future medicine.

### Be able to:

- A1- Use scientific, educational, popular science literature, use the Internet to develop professional activities.
- A2- Use laboratory equipment, work with a microscope.
- A3- Represent the molecular processes taking place in a cell using generalized diagrams.
- A4- Analyze and reproduce molecular models of DNA replication and protein biosynthesis processes.

### Possess:

- P1- Skills of expressing the studied objects and processes in the form of graphs.
- P2- Skills of drawing pictures and diagrams depicting the causes and mechanisms of the birth of children with chromosomal pathology.

- 1. Chair material
- 2. M.T. Madigan, K.S. Bender, D.H. Buckley, W.M. Sattley, D.A. Stahl,15th edition of "Brock Biology of Microorganisms", Pearson NY, 2018, 1064 p.

- 3. S.R. Goodman "Medical Cell Biology" 3th edition, Academic Press, Elsevier, 2008, 336 p.
- 4. В.Ф. Сыч. Общая биология. Учебник для студентов высших учебных заведений. В 2-х томах, Ульяновск, УлГУ. 2005.
- 5. В. М. Константинов, А.Г.Рязанов, Е.О. Фадеева. Общая биология. Учебник для студентов образоват. учреждений среднего проф. образования М.: «Академия», 2004.
- 6. В.Б. Захаров, С.Г. Мамонтов, Н.И. Сонин. Общая биология: учебник для общеобразовательных учреждений. М.: Дрофа, 2004. Рекомендовано Министерством образования РФ.
- 7. "General Biology" Wikibooks.org, 2013, 189 p.
- 8. Glik B., Pasternak J. Molecular Biotechnology, 2002, 590 c.
- 9. Thieman W.J., Palladino M.A. "Introduction to Biotechnology" Second Edition, Pearson International Edition, 2009, 343 p.
- 10. Т.А. Егорова, С.М. Клунова, Е.А. Живухина. Основы биотехнологии. М. Academia, 2003, 208 с.
- 11. Л.А. Лутова. Биотехнология высших растений. Изд-во С-Петербургского университета, 2003, 227с.
- 12. Oliver Brandenberg, Zephaniah Dhlamini, Alessandra Sensi, Kakoli Ghosh, Andrea Sonnino "Introduction to Molecular Biology and Genetic Engineering", Food and Agriculture Organization of the United Nations Rome, 2011, 146p.
- 13. Сассон А. Биотехнология: свершения и надежды. "Мир", М., 1987.
- 14. Սիսակյան Ս.,Ընդհանուր և բժշկական կենսաբանություն, Երևան, 2002։

6. ASSESSMENT COMPONENTS			
Attendance	16		
Assessment of knowledge acquisition, abilities and skills	70		
Independent individual work	14		

#### 7. ASSESSMENT SYSTEM /RATING / SYSTEM Mark Assessment Point Assessment letter "Excellent" 96-100 A+ 90-95 A "Good" 80-89 B+ 70-79 В "Satisfactory" 60-69 C+ 51-59 C "Unsatisfactory" 50 and below D ≥51 S "Tested" "Untested" < 51 U

NAME OF THE COURSE	MICROBIOLOGY,	MICROBIOLOGY, VIROLOGY, IMMUNOLOGY			
TYPE OF COURSE	Mandatory	Mandatory			
EDUCATIONAL LEVEL	CONTINUOUS AN	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM			
THE FORM OF TRAINING	Full time	Full time			
PROFESSION	Doctor	Doctor			
FACULTY	General Medicine	General Medicine			
COURSE	II	II Semester III, IV			
ACADEMIC YEAR	2020-2021	2020-2021			

CREATOR	PhD, Associate prof. Hovik Panosyan		
	PhD Armine Margaryan		
PHONE	+374 94 71 95 90, +374 94 41 84 12		
E-MAIL	hpanosyan@yahoo.ca, arminemargaryan@ysu.am		

CHAIR	Medical-Biological subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Naira Hunanyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
TT	III	4	17	4	120	68	22	46	34	18		+
II	IV	5	15	5	150	75	26	49	51	18	6	
Total		9	32	9	270	143	48	95	85	36	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 9. The origin of life, the levels of formation of living organisms, the structural-functional features of living organisms, their development, phylogeny and evolution.
- 10. The chemical bases of living matter, the main groups of inorganic-organic substances, their role in the structural-functional features of living organisms. The role of biotic and abiotic factors in living organisms.
- 11.Structural levels of living organisms from cell to biocenosis. A systematic approach that will allow us to understand the integrity of individual structural and functional units of the organism and integration into each of the studied levels of organization of living organisms.

### **Abilities:**

- 1. Analyze biological phenomena patterns of natural processes.
- 2. Understand the interaction of the constructive and energetic processes in living organisms.
- 3. Explain the structural and functional features of living organisms.

# Possessions:

10. Ability to work with microscope, biological preparations, analyse modern scientific literature,

prepare the theoretical part of the practical training on your own, prepare presentations and reports using computer equipment.

- 11. Prepare chemical solutions, get acquainted with the rules of safety in the laboratory.
- 12. Ability to work with laboratory equipment, have skills for making various preparations.

# 2. BRIEF CONTENT OF THE COURSE

Subject of medical microbiology, problems and developmental stages, main groups of bacteria, structural-metabolic features of bacteria, classification. Key aspects of infections, epidemiology, immunotherapy, immunoprophylaxis and immunodiagnostic. General virology, normal human microbiota, bacterial detection methods, diseases caused by Gram-positive and Gram-negative bacteria, mycoplasmas, viruses, protozoa. Mycoses.

# 3. GOAL OF THE COURSE

To develop proper professional understanding on the distribution, classification and properties of bacteria, normal human microbiota, immunity, epidemiology, prevention and treatment of diseases caused by pathogenic bacteria.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1. Understanding of general bacteriology,
- K2. Rules of work and safety techniques in bacteriological laboratories,
- K3. The role of the human body in the formation of symbiotic processes between bacteria, the role of the microbiota on the development of opportunistic diseases and normal human microbiota,
- K4. Mechanisms for obtaining antibiotic resistance of bacteria and their determination,
- K5. The role of bacteria in the etiology of major human infectious diseases and its pathogenesis,
- K6. Microbiological diagnostic methods.

### Be able to:

- A1. Apply bacteriological methods and analyze the results of the main laboratory diagnostics microbiological, molecular-biological-immunological methods,
- A2. Substantiate the choice of bacteriological, serological-immunological diagnosis in case of infectious-opportunistic diseases, analyze the obtained results, substantiate the choice of research material in case of diagnosis of infectious-opportunistic disease,
- A3. Apply acquired knowledge to make tactics of antibacterial, antiviral and immunotropic therapy, apply urgent prevention and antitoxic therapy.

# Possess:

- P1. Basic methods of sterilization, disinfection, basic diagnostic skills based on the results of laboratory (bacteriological-immunological) examinations of adult and young patients,
- P2. Basic skills to work with material containing pathogenic or opportunistic pathogenic bacteria,
- P3. Methodology for selection of antimicrobial and immunobiological preparations for the adequate prevention and treatment of infectious and non-infectious diseases.

- 1. Chair material
- 2. Շեկոյան Վ., Մանուկյան Կ. Բժշկական մանրէաբանություն, վիրուսաբանություն և իմունաբանություն։ Երևան, ԵՊԲՀ հրատարակչություն, 2009, 478 էջ։
- 3. Поздеев О.К. Медицинская микробиология, Москва, Геотар-Мед, 2001, 765 с.
- 4. Brooks G.F., Morse S.A., Carroll K.C., Mietzner T.A., Butel J.S., Jawetz, Melnick, & Adelberg's Medical Microbiology. 26th Edition, New York, Chicago, San Francisco, Lisbon, London, Madrid,

- Mexico City, Milan, New Delhi, San Juan, Seoul, Singapore, Sydney Toronto, Copyright © 2013 by The McGraw-Hill Companies.
- 5. Brock Biology of Microorganisms. Madigan M.T., Martinko J.M., Dunlap P.V., Clark D.P., 13<sup>th</sup> ed., Pearson, 2012, 1152 p.
- 6. Practical handbook of microbiology. Eds, Goldman E. and Green L.H. 2nd ed. CRC Press. Taylor & Francis Group, 2009, 854 p.
- 7. Dahlén G., Fiehn N.-E., Olsen I., Dahlgren U. Oral Microbiology and Immunology, Munksgaard Danmark, 2014.

Danmark, 2014.						
6. ASSESSMENT COMPONENTS						
Attendance			16			
Assessment of knowledge acquis	ition, abilities and skills		70			
Independent individual work			14			
7. ASSESSMENT SYSTEM /RAT	ING / SYSTEM					
Mark	Assessment Point	Assessment	letter			
"Excellent"	96-100	A+				
90-95 A						
"Good" 80-89 B+						
70-79 B						
"Satisfactory"	60-69	C+				
	51-59 C					

50 and below

≥51

< 51

D S

U

"Unsatisfactory"

"Tested"

"Untested"

NAME OF THE COURSE	HUMAN ANATOM?	HUMAN ANATOMY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM	PROGRAM				
THE FORM OF TRAINING	Full-time	Full-time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine	General Medicine				
COURSE	I, II	I, II SEMESTER I, II, III				
ACADEMIC YEAR	2020-2021					

CREATOR	DMed Sc Arsen Minasyan
	PhD Laura Avagyan
	Nina Khlghatyan
PHONE	+374 99 77 37 74, +374 93 31 03 02, + 374 98 33 77 97
E-MAIL	arsenminasyan76@gmail.com, nina19-89@mail.ru

CHAIR	Medical – Biological subjects		
CLINICAL BASE	-		
HEAD OF CHAIR	PhD Naira Hunanyan		

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
т	I	4	17	4	120	68	18	50	34	12	6	
1	II	4	17	4	120	68	20	48	34	12	6	
II	III	4	17	4	120	68	20	48	34	12	6	
Total		12	51	12	360	204	58	146	102	36	18	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 1. Life and living organisms, their physical-chemical structure, function, development and evolution;
- 2. Chemical elements, cations, anions, main groups of inorganic-organic substances, their structure, properties and functions;
- 3. Cellular, tissue, organ, organ systems, structural levels of the whole organism. A systematic approach that will allow us to understand the integrity of individual structural and functional units of the organism and integration into each of the studied levels of organization of living organisms. Human ontogeny. Characteristics of oogenesis and spermatogenesis in humans. Phylogeny of organ systems in Cordians.

### **Abilities:**

- 1. Analyze biological phenomena and patterns of natural processes,
- 2. Composition of synthesis and degradation reactions,
- 3. Explain the structure, composition and functions of human organ systems.

#### Possessions:

- 1. Be able to work with molds, skeletons and animal preparations, work with biological literature, lecture transcripts, as well as work with the theoretical part of practical classes,
- 2. Use of hypo- and hypertonic, physiological solutions in biological research,
- 3. Work with templates and macro preparations.

### 2. BRIEF CONTENT OF THE COURSE

The Human Anatomy course examines the human body at the level of organs, organ-systems, and organism (systemic anatomy). During the first semester, students study osteology, arthrology, myology, during the second semester - endocrinology, spanchology, vasculology, during the third semester - neurology and aesthesiology.

# 3. GOAL OF THE COURSE

It studies the human body at the level of organs, organ systems and organism (system anatomy).

The main goal of mastering the course is to create lasting, deep knowledge among students, based on which students will be able to:

- 1. Understand the structural features of the human body as a whole and corresponding organ, organsystem levels.
- 2. To master the Armenian-Latin (Greek) terminology according to the international anatomical nomenclature.
- 3. Learn how to make dissections show anatomical formations on natural preparations.
- 4. To comment on the embryonic and post-embryonic developmental stages of human organs, variants of organ variability, congenital defects.
- 5. Describe the structural, sexual, age-individual features of the human body.
- 6. Realize the structural-functional interdependence and unity of human organs.
- 7. Apply the acquired knowledge later in the study of clinical subjects, as well as in the practice of the future doctor.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know

- K1. Structural features of the human body as a whole and corresponding organ, organ-system levels.
- K2. Performing dissections and showing anatomical formations on natural preparations.
- K3. Armenian-Latin (Greek) anatomical terminology according to the international anatomical nomenclature.
- K4. Stages of embryonic and post-embryonic development of organs, variants of organ variability, congenital defects.
- K5. Structural, sexual, age-individual features of the human body.

# Be able to:

A1. Use educational, scientific, popular literature and the Internet for professional activities.

#### Possess:

P1. Identification of anatomical orientations necessary for physical examination of a living person (palpation, percussion, auscultation).

- 1. Chair material.
- 2. Gray's Anatomy, 41st Edition, 2016
- 3. Frank H. Netter Atlas of Human Anatomy 6th Edition, 2014
- 4. Keith L. Moore Clinically Oriented Anatomy 7th Edition, 2017
- 5. Ա.Ա.Սարաֆլան, Գ.Պ.Քլալյան, Մարդու անատոմիա, 1995
- 6. Сапин М.Р. Анатомия человека. М.: Медицина, 2009 в 2-х томах

- 7. М. Р. Сапин, Д. Б. Никитюк НОРМАЛЬНАЯ И ТОПОГРАФИЧЕСКАЯ АНАТОМИЯ ЧЕЛОВЕКА. В 3 томах. (2007)
- 8. Pocket Atlas of Human Anatomy Feneis H., Dauber W, 2012
- 9. Синельников Р.Д. Атлас анатомии человека. М.: Медицина, 1996 в 4-х томах
- 10. Гайворонский И.В. Норм. Анатомия человека: В 2т: Учеб. СПб. : Спец. литр., 2003-2004.
- 11. Привес М.Г., Лысенков Н.К., Бушкович В.И. Анатомия человека.- 11-е изд., испр. и доп. СПб. : Гиппократ, 2001
- 12. Сапин М.Р. Атлас нормальной анатомии человека. М: Мед пресс информ, 2006-2007.
- 13. Клиническая анатомия Учебное пособие (2 тома) Кирпатовский И.Д., Смирнова Э.Д. 2003 год

6. ASSESSMENT COMPONENTS	POINT
Attendance	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

7. 7. DOLLOON LLIVE OF OTHER PROPERTY.	7. ABBEBBINET BIBLEM / BIBLEM					
Mark	Assessment Point	Assessment letter				
"Excellent"	96-100	A+				
	90-95	A				
"Good"	80-89	B+				
	70-79	В				
"Satisfactory"	60-69	C+				
	51-59	С				
"Unsatisfactory"	50 and below	D				
"Tested"	≥51	S				
"Untested"	< 51	U				

NAME OF THE COURSE	NORMAL PHYSIOL	NORMAL PHYSIOLOGY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM	PROGRAM				
THE FORM OF TRAINING	Full-time	Full-time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine	General Medicine				
COURSE	II	II SEMESTER III, IV				
ACADEMIC YEAR	2020-2021	2020-2021				

CREATOR	PhD H. Yu. STEPANYAN
	DMed Sc S. SARGSYAN
PHONE	+ 374 99 88 13 23, +374 10 42 48 65
E-MAIL	harutyun su@yahoo.com, susi.sar@rambler.ru

CHAIR	Medical – Biological subjects		
CLINICAL BASE	-		
HEAD OF CHAIR	PhD Naira Hunanyan		

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
II	III	5	17	5	150	85	26	59	41	18	6	
11	IV	5	15	5	150	75	30	45	51	18	6	·
Total		10	32	10	300	160	56	104	92	36	12	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- Basic laws, phenomena and processes of physics, the nature of physical factors effect on the organism, physical phenomena laying in the base of processes going on in human organism, the physical principles of the work of medical devices,
- The biochemical nature of the processes that existing at the molecular and cellular levels of a living organism, structure and chemical properties of biologically important compounds main classes, the role of cell membranes and their transport systems in the metabolic processes, the safety rules for working with chemical substances in the laboratories.
- The general consistent pattern of human ontogenesis, life origin and development, laws of genetics, the knowle on the cells biology, homeostasis, regeneration, ecology, the safety and working rules with animals in the biological laboratories,
- Anatomical, age-sex related and individual features of the structure and development of the human body,
- The structural features of cells, tissues and organs, methods of their study,
- The role of famous physiologists in the development of medical science, their most known

discoveries,

• The knowledge of medical, anatomical, physiological main terms in latin.

#### Abilities:

- With the help of Chemistry laws to explain the physiological processes and the influence mechanisms of biologically active substances,
- To explain the role of ecology factors in physiological processes,
- To represent the organ-systems anatomical and morpho-functional characteristics in the organism.
- To assess histophysiological state of cells, tissues and organs in the human body.

#### Possessions:

- Skills to work with substances and devices in the laboratory.
- Skills to work with magnifying devices.

# 2. BRIEF CONTENT OF THE COURSE

The normal physiology course comprises 2 semesters of classes.

The following sections are included in the III semester: physiology of the blood, digestive system, metabolism of energy and thermoregulation, physiology of the muscles, nerve fibers, excitable tissues. Physiology of the excretory, cardio-vascular, respiratory, endocrine, central nervous, sensory systems and higher nervous activity are included in the IV semester.

### 3. GOAL OF THE COURSE

The goal of the course is to teach vital functions the of cells, organ-systems and the organism, the neurohumoral mechanisms of their regulation, functional regulation and modeling principles, which, eventually, will be the basis and simplify the studying of medical subjects.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

# Know:

- K1. Functions of human organism, the main principles and mechanisms of their regulations (at the molecular, cellular, organ, organ system, and organism levels),
- K2. The morpho functional features of human organism,
- K3. The age-specific features of physiological functions, their specifities during the physical and mental work,
- K4. Generation of Excitation and Inhibition, the modeling principles of physiological functions,
- K5. The main physiological concepts and terms applied in medicine.

## Be able to:

- A1. To make calculations based on the results of tasks and experiments,
- A2. To analyse the experimental research data of physiological functions of blood, heart, vessels, lungs, other organs and systems in norm.

#### Possess:

- P1. Skills to work with the simplest medical instruments (neurological hammer, lancet, medical tweezers, clamps etc.),
- P2. Skills to measure the main functional indicators of organism (blood parameters, blood pressure, pulse, temperature etc.).

- 1. Chair material
- Arthur C. Guyton, John E. Hall. *Textbook of Medical Physiology*. Twelfth edition. ISBN:978-1-4160-4574-8, 2011.
- 3. Lauralee Sherwood. *Human Physiology: From Cells to Systems.* Seventh edition. ISBN-13: 978-0-495-39184-5. 2010.

- 4. *Human physiology*. Stuart Ira Fox, USA, 12th edition. ISBN 978-0-07-337811-4, 2011.
- 5. **Физиология человека.** Р. Шмидт, Г. Тевс, Платон Костюк, Мир,2005.
- 6. Ս.Մ. Մինասյան, Ծ.Ի. Ադամյան, Ն.Վ. Սարգսյան, «*Մարդու ֆիզիոլոգիա*», Երևան, «Զանգակ-97», 2009թ.։
- 7. *Մարդու ֆիզիոլոգիայի հիմունքներ։* Դ.Ն. Խուդավերդյան, Վ.Բ. Ֆանարջյան, Երևան, 1998։
- 8. Косицкий Г.И. *Нормальная физиология*, М., 1984г.
- 9. *Նորմալ ֆիզիոլոգիայի գործնական աշխատանքների ձեռնարկ,* Սարգսյան Ս.Հ., ուսումնամեթոդական ձեռնարկ, ԱԲՀ, Երևան, 2004.

The first of the f				
6. ASSESSMENT COMPONENTS				
Attendance				
Assessment of knowledge acquisition, abilities and skills				
Independent individual work				
7. ASSESSMENT SYSTEM /RATING / SYSTEM				
Mark	Assessment Point	Assessment	letter	
"Fycellent"	96-100 A+			

.,,,,						
Mark	Assessment Point	Assessment letter				
"Excellent"	96-100	A+				
	90-95	A				
"Good"	80-89	B+				
	70-79	В				
"Satisfactory"	60-69	C+				
	51-59	С				
"Unsatisfactory"	50 and below	D				
"Tested"	≥51	S				
"Untested"	< 51	U				

NAME OF THE COURSE	HISTOLOGY, EM	HISTOLOGY, EMBRYOLOGY, CYTOLOGY				
TYPE OF COURSE	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS A	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM	PROGRAM				
THE FORM OF TRAINING	Full-time	Full-time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine	General Medicine				
COURSE	I, II	SEMESTER	II, III			
ACADEMIC YEAR	2020-2021					

CREATOR	PhD Naira Hunanyan			
	PhD Evelina Hakobjanyan			
PHONE	+ 374 91 07 11 07, +374 77 91 13 00			
E-MAIL	naira hunanyan@yahoo.com			

CHAIR	Medical – Biological subjects		
CLINICAL BASE	-		
HEAD OF CHAIR	PhD Naira Hunanyan		

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	II	5	17	5	150	85	18	67	41	18	6	
II	III	4	17	4	120	68	18	50	34	12	6	
Total		9	34	9	270	153	36	117	75	30	12	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- General patterns of the origin and development of life, properties of biological systems, knowledge
  of the human origin and individual development, as well as the general patterns of embryonic
  development of different animal species,
- Main patterns of evolutionary changes of the organs and organ systems in human,
- Basics of Genetics and Cell Theory, structure of cells and extracellular elements,
- General patterns of the structural organization of the human body, structural functional relationships between different parts of the body,
- Structure and location of organs and organ-systems, their functions in different age groups,
- Location of autonomic nervous system vessels, nerves and ganglia,
- The microscopic methods for studying biological strutures (light and electron microscopy), based on the knowledge of optics and mathematics,
- Physical methods of study, for evaluation of the impact of external and internal fators on the metabolic processes of organs and organ-systems,
- Knowledge of the laws and patterns of Mathematics and Physics, to explain the structural and functional features of membranes in Cytology (transport of substances via the cell membrane etc.),

- Knowledge of the medical terminology in Latin,
- Knowledge of the General and Bioorganic chemistry is required:
  - To understand the nature of biochemical processes in cells, tissues and organs,
  - To understand the staining mechanism of histological specimens,
  - To know various hormones, biologically active substances, other chemical components.

### Abilities:

- To use the laboratory devices, work with microscope,
- To determine mitotic activity of tissues,
- To explain the nature of aberrations emerging during development, which bring to formation of various defects,
- To get oriented in the structure and location of organs in anatomical preparations: to show and correctly name the organs in English and Latin.

#### Possessions:

Student has to own the system of medical-anatomical concepts.

# 2. BRIEF CONTENT OF THE COURSE

# Histology, embryology, cytology course comprises 2 semesters of classes.

The following sections are included in the II semester: cytology- studying the vital functions and structure of the human cells – cell membrane, nucleus, organelles and inclusions, cell renewal and death, embryology - studying the embryonic development and the initial stages of the fetal period, general histology – studying the main tissues of the human body, functional and cellular elements of various tissues. The section of microscopic anatomy is included in the III semester- studying the structure of organs and organ systems in macroscopic, microscopic and electron microscopic levels, also, taking into account their functions.

### 3. GOAL OF THE COURSE

The goal of the course is to form scientific ideas about development and microscopic morphology of human cells, tissues and organ systems, which, in further, will be basis for the study of clinical subjects and development of medical thinking.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1. Methods of histological examination, the structure of the microscope,
- K2. Preparation of specimens and staining methods for microscopy,
- K3. Structure, development and location peculiarities of the cells, tissues, organs, and organ systems in terms of interaction with their functions,
- K4. Main patterns of activity and development of organism due to the structural features of cells, tissues and organs, histofunctional fatures of the tissues, their study methods,
- K5. The physicochemical nature of the processes existent in the living organism, that take place on the molecular, cellular, tissue and organ levels.

#### Be able to:

- A1. Work with magnifying devices (microscopes, optical and simple magnifying glasses),
- A2. Describe the structure of cells and tissues, record the histophysiological assessment of varied situations,
- A3. Determine correctly the microstructure, location, histological description and correct names of organs and their constituents.

#### Possess:

P1. Microscopy skills, examination of histological specimens and analysis of the light and electron

micrographs.

# 5. LITERATURE

- 1. Chair material
- 2. **Anthony L. Mescher.** *Junqueira's Basic Histology.* Text and Atlas. 14th edition, ISBN 978-0-07-184268-6, Mc Graw Hill Education, LANGE, 560 pp., 2016.
- 3. **Michael H. Ross, Wojciech Pawlina**. *Histology* (with correlated cell and molecular biology). A Text and Atlas. Sixth Edition, ISBN 978-0-7817-7200-6. Two Commerce Square 2001, Market Street, Philadelphia, PA 19103, 975 pp., 2011.
- 4. **Leslie P. Gartner, James L. Hiatt.** *Histology.* A Text and Color Atlas. Sixth Edition, ISBN 978-1-4511-1343-3. Two Commerce Square, 2001 Market Street, Philadelphia, PA 19103, Lippincott Williams & Wilkins, 525 pp., 2014.
- 5. **Sadler T. W.** *Langman's medical embryology*, 12th ed. ISBN 978-1-4511-1342-6, Copyright © 2012 Lippincott Williams & Wilkins, a Wolters Kluwer business. 351 West Camden Street Two Commerce Square Baltimore, MD 21201 2001 Market Street Philadelphia, PA 19103.
- 6. *Гистология*. Учебник, 2-е изд. Под ред. Улумбекова Э. Г., Челышева Ю.А. Москва, ГЭОТАР-МЕД, ISBN 5-9231-0228-5, 672 стр., 2002.
- 7. **Быков В.Л.** *Частная гистология человека.* 2-е изд, СОТИС, Санкт-Петербург, ISBN 5-85503-116-0, 298 стр., 1999.
- 8. **Кузнецов С.Л.**, **Мушкамбаров Н.Н.**, **Горячкина В.Л.** *Атлас по гистологии*, *цитологии и эмбриологии*. Москва, МИА, ISBN 5-89481-055-8, 374 стр., 2002.
- 9. **Алмазов И.В., Сутулов Л.С.** *Атлас по гистологии и эмбриологии.* Москва, "Медицина", 544 стр., 1978.
- 10. **Մահակյան Կ.Թ.** *Հյուսվածաբանություն*, Երևանի Մ. Հերացու անվան պետական բժշկական համալսարան, 2013թ.

6. ASSESSMENT COMPONENTS	POINT
Attendance	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	PATHOLOGICAL A	NATOMY			
TYPE OF COURSE	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL			
	PROGRAM	PROGRAM			
THE FORM OF TRAINING	Full-time	Full-time			
PROFESSION	Doctor	Doctor			
FACULTY	General Medicine				
COURSE	II, III	SEMESTER	IV, V		
ACADEMIC YEAR	2020-2021				

CREATOR	PhD, Associate prof. Lusine Aghabekyan	
	DMed Sc Asadur Namagerdi	
	Hasmik Barseghyan	
PHONE	+374 93 33 15 25, +374 55 68 10 31, +374 98 28 90 41	
E-MAIL	laghabekyanbk@inbox.ru,	
	asadoor.amirkhanian6@gmail.com	
	Hasmikbarseghyan220@gmail.com	

CHAIR	Medical – Biological subjects
CLINICAL BASE	"Surb Grigor Lusavorich" Medical Center
HEAD OF CHAIR	PhD Naira Hunanyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
II	IV	5	15	5	150	75	30	45	51	18	6	
III	V	4	17	4	120	68	26	42	34	12	6	
Total		9	32	9	270	143	56	87	85	30	12	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- General patterns of development and of the origin of life, human anthropogenesis and ontogenesis,
  laws of genetics and their importance in medicine, the principles of heredity and variability in
  individual development, as etiological and pathogenetic basics of hereditary and multi-etiological
  diseases basics of ecological, parasitic phenomena bioecological diseases, organ development
  defects, basic concepts and problems of the biosphere, ecology, parasitic phenomena, bio-ecological
  diseases.
- Chemical properties of the main classes of biologically active organic compounds, structure of the most important chemical compounds and Functions (nucleic acids, natural proteins, water-soluble vitamins, fats, hormones, etc.).
- Methods of physico-chemical analysis in medicine (titration, electrochemical, chromatographic, viscometric).

- The basic patterns of development of the bioactivity of the human organism, based on the structural features of the cell, tissues and organs, histofunctional features of tissue elements, methods of their study. In the physical, chemical, biological laboratories, the safety rules for working with reagents, animals, materials, general patterns of origin and development, human anthropogenesis, ontogenesis, functional systems of the human body, their regulation, self-regulation in interaction with the external environment.
- Anatomical-physiological, age-sexual and individual properties of a healthy and diseased organism.
- Anatomical terms (Armenian and Latin), anatomy of organs and their systems, structural features, basic functions.
- Relationships of organs, their projection on the surface of the body.
- Classification of microorganisms and viruses, morphology and physiology, their impact on human health, methods of microbiological diagnosis, use of basic antibacterial, antiviral-biological preparations.
- The structure and functions of the human immune system, its structural features, cellular and molecular mechanisms of immune system development and activity, the main forms of the immune response, stages, hereditary control, methods of immunological diagnosis.

### Abilities:

- Microscopic examination of histological preparations using a dry microscope system, composition of the family tree. Determination of hereditary trait, solution of genetic problems, diagnosis of pathogens, recognition of human parasitic diseases on preparations, slides and photos.
- Distinguish normal levels of metabolite levels in blood serum (glucose, urine, bilirubin, uric acid, lactic acid, pyro chloric acid, etc.) from pathologically altered, read a protein diagram and explain the reasons for the differences.
- Predict the direction of chemical transformations of biologically active substances and the results of physico-chemical processes that perform thermochemical calculations necessary for the formation of energy enzymes to study the basics of rational food.
- Comment on the results of the most common functional diagnostic methods used to detect diseases of the blood, cardiovascular, lung, kidney, liver and other organs. Determine and evaluate the results of electrocardiography, spirography, thermometry, hematological parameters.
- Work with magnifying equipment microscope, optical ordinary lenses; give histophysiological assessment of the condition of various cellular, tissue structures and organs.
- On organs and anatomical preparations, find and show correctly their parts, details of their structure, name them correctly in Armenian and Latin.
- Find individual organs, large vessels, nerves by the method of preparation.
- Schematically depict the main anatomical formations and organs.
- Work with magnifying equipment; microscope, optical ordinary lenses, diagnose human pathogens with the help of preparations, slides, pictures, perform bacteriological-immunological diagnosis.

# 2. BRIEF CONTENT OF THE COURSE

The course studies General anatomic pathology including cellular pathology, general pathological processes which are present in all of the diseases (including blood diseases) and Systemic anatomic pathology involving the etiology, pathogenesis and morphologic patterns of all of the diseases.

# 3. GOAL OF THE COURSE

The goal of the "Pathological Anatomy" course is to study the structural basis of diseases and of pathological processes, their etiology and origin, pathological manifestations, complications, study of the final outcome and death causes and further application of the acquired knowledge in clinical

departments and in the practical work of a doctor.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- K1. Terms used in pathological anatomy and basic research methods.
- K2. Concepts of disease etiology, pathogenesis, morphogenesis, pathomorphosis, principles of disease classification.
- K3. The essence and basic patterns of general pathological processes.
- K4. Typical changes of internal organs in common diseases.
- K5. Basics of clinical-anatomical analysis, principles of diagnosis of pathological-anatomical structure.

### Be able to:

- A1. To substantiate the nature of the pathological process and its clinical manifestations.
- A2. Compare the etymological-clinical manifestations of diseases at different stages of their development.
- A3. To determine the causes of diseases, pathogenesis, morphogenesis, their manifestations, complications and outcomes, such as pathomorphosis, and in case of death, the cause mechanisms (thanatogenesis).

### Possess:

P1. Skills in working with pathology-anatomical and micro-macro-preparations, identification of typical pathological processes.

# 5. LITERATURE

- 1. Chair material
- 2. «Պաթոլոգիական անատոմիա», հեղինակ-խմբագիր՝պրոֆ. Ն.Դ. Վարդազարյան, Երևան, 2006
- 3. «Патологическая анатомия». Под ред. А.И. Струкова, В.В. Серова. Учебник. Переиздание. М.: ОАО Издательство «Медицина», 2015.
- 4. ROBBINS AND COTRAN PATHOLOGIC BASIS OF DISEASE, ninth edition, ISBN: 978-1-4557-2613-4© 2015 by Elsevier, Inc.
- 5. Vinay Kumar, Abul K. Abbas, Jon C. Aster. Robbins Basic Pathology, 9-th edition, 910, Copyright © Saunders 2013, an imprint of Elsevier Inc. Printed in Canada.

6. ASSESSMENT COMPONENTS	POINT
Attendance	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	PATHOLOGICAL	PATHOLOGICAL PHYSIOLOGY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AN	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM	PROGRAM				
THE FORM OF TRAINING	Full-time	Full-time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine	General Medicine				
COURSE	III	III SEMESTER V, VI				
ACADEMIC YEAR	2020-2021	2020-2021				

CREATOR	DMed Sc Asadur Namagerdi	
	PhD Narek Mkrtchyan	
	Lilit Sukiasyan	
PHONE	+374 99 74 74 67, +374 77 84 49 94, +374 91 36 38 16	
E-MAIL	asadoor.amirkhanian6@gmail.com,	
	arksm@gmail.com,	
	lilit.sukiasyan@inbox.ru	

CHAIR	Medical – Biological subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Naira Hunanyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
III	V	4	17	4	120	68	26	42	34	18		+
1111	VI	5	15	5	150	75	30	45	57	12	6	
Total		9	32	9	270	143	56	87	91	30	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- Fundamentals of cytology, basic methods and laws of genetics and heredity research. Basic concepts and problems of biosphere and ecology. The phenomenon of parasitism and bioecological concepts.
- The main metabolic pathways of carbohydrates, fats, amino acids and proteins, their role in the morpho-functional patterns of the cell. The role of cell membrane and transporting systems in metabolism. The values of the main metabolic products (glucose, urine, uric acid, bilirubin, lactic acid, etc.) in the blood serum in norm.
- Functional features of organs and systems, regulatory mechanisms and peculiarities.
- Basic patterns of cells and tissues structure, morphology, location and development, morphofunctional features of histological elements, the main methods of their study.
- Classification, morphology and physiology of microorganisms and viruses, their impact on human health. Methods of bacteriological diagnosis, use of basic antibacterial, antiviral biological

preparations.

#### **Abilities:**

- Comment on the results of the most common functional diagnostic methods used for blood, heart, vessels, kidneys, liver, and other organs.
- Describe different cellular and tissue structures.
- Diagnose human parasitic pathogens on slides, preparations and photos.

#### Possessions:

• Master the skills of histological preparations observation and the electron microimages analysis.

# 2. BRIEF CONTENT OF THE COURSE

The "Pathological Physiology" course studies the general section of pathological physiology: the causes of disease occurrence, the course of development, the mechanisms of the effect of pathogenic factors, the ways of spreading, the pathophysiological specifications of disorders of the blood, cardiovascular systems, and the following private sections- pathophysiological features of respiratory, gastrointestinal, genitourinary, endocrine and nervous system disorders.

### 3. GOAL OF THE COURSE

The goal of the course is to teach the basic regularities and mechanisms of disease development and human health, as well as to provide knowledge about disease etiology, pathogenesis, principles of therapy of clinical manifestations, and disease prevention.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1. The etiology, pathogenesis and preventive measures of most common human pathologies and diseases; modern classification of diseases.
- K2. Clinical manifestations of the most common diseases in different age groups, peculiar features of the course, possible outcomes, complications.
- K3. Etiology, pathogenesis and manifestations of hereditary diseases and of those with the hereditary predisposition in humans, methods of detection.
- K4. The main clinical manifestations of infectious diseases, laboratory and instrumental examination methods; the theoretical basis of the methods, analysis of results.
- K5. Constitutional, gender-related, age-related and individual features of various pathologies in the human body.

#### Be able to:

- A1. Use educational, scientific, popular literature and the Internet for professional activities.
- A2. Implement and organize medical and preventive measures, taking into account the age, gender, social and professional peculiarities of the population.

# Possess:

- P1. Clinical diagnostic algorithms by referring the patient to appropriate specialists.
- P2. To master the basic medical and therapeutic measures of the organization of first aid in lifethreatening emergency situations.

- 1. Chair material
- 2. Адо, Патологическая физиология, Москва, 2002
- 3. П. Литвицкий, Патофизиология, Москва, 2002
- 4. ROBBINS AND COTRAN PATHOLOGIC BASIS OF DISEASE, ninth edition, ISBN: 978-1-4557-

2613-4© 2015 by Elsevier, Inc.					
5. ROBBINS BASIC PATHOLOGY, ninth edition, ISBN: 978-0-323-35317-5 © 2013 by Elsevier Inc					
6. ASSESSMENT COMPONENT	6. ASSESSMENT COMPONENTS POINT				
Attendance			16		
Assessment of knowledge acquis	sition, abilities and skills		70		
Independent individual work			14		
7. ASSESSMENT SYSTEM /RAT	TING / SYSTEM				
Mark Assessment Point Assessment letter					
"Excellent"	96-100 A+				
	90-95	A			
"Good"	80-89	B+			
	70-79	В			
"Satisfactory" 60-69 C+					
51-59 C					
"Unsatisfactory" 50 and below D					
"Tested" ≥51 S					
"Untested" < 51 U					

NAME OF THE COURSE	PHARMACOLOGY	PHARMACOLOGY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND I	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM				
THE FORM OF TRAINING	Full-time	Full-time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine					
COURSE	III	SEMESTER	I, II			
ACADEMIC YEAR	2020-2021					

CREATOR	Ghukasyan Nelli
PHONE	+374 55 49 41 49
E-MAIL	nellka2011@gmail.com

CHAIR	Natural sciences
CLINICAL BASE	-
HEAD OF THE CHAIR	PhD H.G. Javrushyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
III	I	4	17	4	120	68	22	46	34	18		+
111	II	4	15	5	120	75	26	49	27	12	6	
Total			8	32	9	240	143	48	95	61	30	6

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- 1. Anatomical, physiological, sex-age and individual features of the structure and development of a healthy and sick organism, functional systems of the organism, their regulation and self-regulation under the influence of the external environment in normal and pathological conditions.
- 2. Classification, morphology and physiology of viruses and microbes, their impact on human health, methods of microbiological diagnosis, use of basic antibacterial, antiviral and biological preparations.
- 3. Structure and function of the most important chemical compounds: nucleic acids, natural proteins, water-soluble and fat-soluble vitamins, hormones.

#### Aabilities:

1. Perform preliminary diagnosis - synthesize information about the patient in order to find out the causes and pathology of the disease.

#### **Possessions**

- 1. To work with biological literature, transcripts of lectures, as well as to work with the theoretical part of practical classes.
- 2. Conduct experimental work on experimental animals.

#### 2. BRIEF CONTENT OF THE COURSE

The "Pharmacology" course provides knowledge of the clinical pharmacological characteristics of the main group of pharmacological agents and knowledge of the rational selection of certain pharmacological agents in emergency situations and major pathological syndromes, taking into account the anti-doping legislation.

# 3. GOAL OF THE COURSE

The main goal of the course is to teach the basic knowledge of drug treatment in various pathological conditions, the effect of pharmacological agents on the organism and the effect of the organism on pharmacological agents, indications and contraindications for the use of pharmacological agents, ways of obtaining new drugs, to know the differentiation of drug therapy for treatment and diagnostic purposes, for different groups of the population. Teach prescribing rules.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- **K1.** The classification and the general characteristics of pharmacological agents, pharmacodynamics and pharmacokinetics, indications for use, contraindications and side effects.
- **K2.** The general principles of formulation of prescriptions and prescribing of pharmacological agents.
- **K3.** Theoretical foundations of information collection, storage, search, processing, transformation, dissemination in biological and medical systems, application of information computer systems in medicine and healthcare.

#### Be able to:

- **A1.** To use educational, scientific literature, the Internet in order to develop professional activities.
- **A2.** the effects of pharmacological agents and the possibilities of their use for therapeutic treatment based on their pharmacological properties.
- **A3.** To write prescriptions, to apply different pharmacological forms of pharmacological agents in case of certain pathological conditions, based on their pharmacodynamic and pharmacokinetic characteristics.
- **A4.** To evaluate the possible unwanted phenomena in case of overdose of pharmacological agents and ways of their elimination.
- **A5.** To establish the principles of pathological therapy of the most common diseases.

#### Possess:

- **P1.** The ability to use pharmacological agents for the treatment, recovery and prevention of various diseases and pathological conditions.
- **P2.** Basics of first aid, diagnostic and therapeutic measures performed during situations accompanied by immediate and life-threatening immune disorders.

#### 5. LITERATURE

- 1. Chair material.
- 2. Lippincott pharmacology 7-th edition.
- 3. Medical pharmacology 5<sup>th</sup> edition
- 4. U. Շ. ՍԱՔԱՆՅԱՆ, «Ֆարմակոլոգիա», «Լույս» հրատարակչություն, Երևան, 1985
- 5. Է. Գաբրիելյան, Վ. Հակոբյան, Է. Ամրոյան, Ռ. Բեկյան, Ռ. Բորոյան «Դեղաբանություն», Երևան։ Լիգանդ, 1992- 452 էջ։

6. ASSESSMENT COMPONENTS	POINT
Attendance	16
Assessment of knowledge acquisition, abilities and skills	70
Independent Individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	HYGIENE				
TYPE OF COURSE	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM				
THE FORM OF TRAINING	Full time				
PROFESSION	Doctor				
FACULTY	General medicine				
COURSE	III SEMESTER V, VI				
ACADEMIC YEAR	2020-2021				

CREATOR	PhD Associate Professor Albert Danilov
	PhD Anna Sargsyan
	Marine Voskanyan
PHONE	+374 94 06 12 20, +374 94 91 12 09, +374 77 38 28 82
E-MAIL	anna.v.mnatsakanyan@gmail.com, marinecolog@yahoo.com

CHAIR	Social Medicine
CLINICAL BASE	-
HEAD OF CHAIR	PhD Anna Ovchyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
III	V	3	17	3	90	51	18	33	26	13		+
111	VI	3	15	4	90	60	30	30	21	9	·	+
Total		6	32	7	180	111	48	63	47	22		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- 1. General biology,botany,zoology,human anatomy.
- 2. Chemical elements, the main groups of inorganic-organic substances, their structure, properties and functions.
- 3. Cellular, tissue, organ, organ systems and structural levels of the whole organism.

# Abilities:

- 1. Analyze biological phenomena and patterns of natural processes.
- 2. Classification of reagents and reactions. Composition of connection, demolition, replacement and exchange transformations.
- 3. Explain the structure, composition and functions of human organ-systems.

# Possessions:

- 1. Work with preparations
- 2. Work with literature

### 2. BRIEF CONTENT OF THE COURSE

The course "Hygiene" teaches atmospheric air, water hygiene, rational food, food poisoning, soil hygiene, climate and human health, hygiene features according to age groups, hygiene of medical institutions, human ecology, urbanization, household and industrial poisons and poi sonings, external environmental factors, their impact on human organism, work hygiene, features, field hygiene.

### 3. GOAL OF THE COURSE

The main goal of the "Hygiene" educational course is to give students basic knowledge about preventive medicine in accordance with international standards.

# 4 EDUCATIONAL FINAL RESULTS: At the end of the course the student should:

### Know:

- K1. Theoretical knowledge about ecology, food, utility, work, radiation, military and children and adolescent personal hygiene.
- K2. About the impact of harmful factors affecting human health and diseases related to them.
- K3. Population health indicators, factors that shape human health (ecological, professional, climatic, endemic, social, epidemiological, psychochemical, hereditary)
- K4. Hygienic issues of food, hygiene of medical and sanitary care of employees, organization of preventive measures, methods of sanitary-enlightenment work.

#### Be able to:

- A1. Plan, analyze and assess the health status of the population and external environmental factors affecting it.
- A2. Participate in the process of organizing preventive and sanitary-hygienic assistance to the population, taking into account its social-professional and age-gender structure.
- A3. Take preventive and sanitary measures.
- A4. Able to take water, food, soil samples for laboratory tests, compile daily ration, regime, perform sanitary-lighting works.

### Possess:

- P1. Interpretation of complex results of diagnostic methods.
- P2. General assessment of the state of health of the population, a separate group of people and individual health assessment.
- P3. With the operation of the main measuring and testing equipment used in the field of hygiene, such as measuring atmospheric air radiation, thermometer, humidity, air velocity measuring, noise measuring etc.

- 1. Chair material
- 2. Гигиена и экология человека: учебное пособие / В.М.Глиненко и др.. М., 2010
- 3. Гигиена и экология человека /Трушкина Л.Ю., Трушкин А.Г., Демьянова Л.М.2-е изд., переработанное и дополненное. Ростов н/Д.: Феникс, 2003. 448 с. ISBN 5-222-03039-3.
- 4. Гигиена детей и подростков / Кучма В.Р. М., 2013.
- 5. Общая и военная гигиена / под ред. Лизунова Ю.В. и Кузнецова С.М. Спб., 2012.
- 6. World Health Organization resources http://www.who.int/en/.
- 7. Current Trends in Human Ecology, Edited by Priscila Lopes and Alpina Begossi. Cambridge Scholars Publishing, 2009.
- 8. General Hygiene & Environmental Health. Edited and Published by V. M. Zaporozhan, the State Prize-Winner of Ukraine, Academician of the Academy of Medical Sciences of Ukraine, 2005.

6. ASSESSMENT COMPONENTS				
Attendances				
Assessment of knowledge acquisi	tion, abilities and skills		70	
Independent individual work			14	
7. ASSESSMENT SYSTEM /RATI	NG / SYSTEM			
Mark Assessment Point Assessment				
"Excellent"	96-100	A+		
"Good"	"Good" 80-89 B+			
70-79 B				
"Satisfactory" 60-69 C+				
"Unsatisfactory" 50 and below D				
"Tested" ≥51 S				
"Untested" < 51 U				

NAME OF THE COURSE	EPIDEMIOLOGY					
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM				
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor	Doctor				
FACULTY	General medicine					
COURSE	IV	Semester	VII			
ACADEMIC YEAR	2020-2021					

CREATOR	PhD, associate professor Alert Danilov
	PhD Anna Sargsyan
	Arpine Arakelyan
PHONE	+374 94 06 12 20, +374 94 91 12 09, +374 94 32 17 09
E-MAIL	anna.v.mnatsakanyan@gmail.com, arpi.arakelyan.89@mail.ru

CHAIR	Social Medicine
CLINICAL BASE	-
HEAD OF CHAIR	Ph.D. Anna Ovchyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
IV	VII	4	17	4	120	68	24	44	34	12	6	
Total		4	17	4	120	68	24	44	34	12	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# **Knowledge:**

- 1. To study the spread of diseases in different groups of the population, to determine the cause and result connections.
- 2. Implementation of preventive measures in the focis of infection.

# Abilities:

- 1. Prevention of infectious diseases.
- 2. Implementation of preventive measures in the focis of infection.

### Possessions:

- 1. Possession of theoretical knowledge of public health and healthcare.
- 2. To be able to do first and medical aid in emergency situations and participate in medical evacuation.

### 2. BRIEF CONTENT OF THE COURSE

The course of "Epidemiology" examines the problems of the subject, the doctrine of the epidemic process, the factors of transmission of infectious diseases, the expression of the epidemic process, the principles of prevention and control of infectious diseases, immunoprophylaxis of infectious diseases, the process of disinfection, epidemiology of respiratory and enteral diseases, Viral hepatitis and HIV,

nosocomial infections and military epidemiology.

# 3. GOAL OF THE COURSE

The goal of the course is to study the causes of the spread of infectious diseases in human society, to use the acquired knowledge, to fight against those diseases, to prevent them, and finally to eliminate them completely.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- K1. Description of epidemiology as a science of epidemiological process and as a medical science.
- K2. Components of epidemiological methods and ingredients of epidemiological diagnosis.
- K3. The groups of pidemic measures, and mean problems of different medical services.
- K4. Basics of epidemiological control of infectious diseases.

#### Be able to:

- A1. Perform a retrospective analysis of morbidity and mortality to determine the etiological factors.
- A2. Implement the necessary comprehensive anti-epidemic measures in the foci of infectious diseases.
- A3. Organize and maintain anti-epidemic regime in hospitals and other medical institutions.
- A4. Organize immunization of infectious diseases.

### Possess:

P1. The work of main methods of laboratory analyzies and equipment used in the epidemiology.

### 5. LITERATURE

- 1. Chair material
- 2. Ալեքսանյան Ա. Բ., «Ինֆեկցիոն և վիրուսային հիվանդությունների էպիդեմիոլոգիան և պրոֆիլակտիկան», Երևան, 1975 թ.։
- 3. Դեղձունյան Կ. Մ., Համբարձումյան Ա. Ձ., «Համաձարակաբանություն», Երևան, 1999 թ.։
- 4. Беляков В. Д., Яфаев Р. Х., "Эпидемиология", Москва, 1989 г.
- 5. "Руководство по эпидемиологии инфекционных болезней", под ред. В. И. Покровского, Москва, 1990 г.
- 6. Черкасский Б. И., "Эпидеиологический диагноз", Москва, 1990 г.
- 7. Черкасский Б. И., "Общая эпидемиология", Москва, 2002 г.
- 8. Черкасский Б. И., "Частная эпидемиология" /том 1, 2/, Москва, 2002 г.
- 9. Principles of epidemiology in public health practice. Third edition. U.S. Department of Health and Human Services.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	INFECTIOUS DISEASI	ES			
TYPE OF COURSE	Mandatory	Mandatory			
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM				
THE FORM OF TRAINING	Full time				
PROFESSION	Doctor				
FACULTY	General Medicine				
COURSE	V	Semester	IX, X		
ACADEMIC YEAR	2020-2021				

CREATOR	Anahit Mkrtchyan, Arpine Arakelyan
PHONE	+374 93 59 04 66, +374 94 32 17 09
E-MAIL	an.mkrt@inbox.ru, arpi.arakelyan.89@mail.ru

CHAIR	Social medicine
CLINICAL BASE	Nork "Infectious Diseases Clinical Hospital
HEAD OF CHAIR	PhD Anna Ovchyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class.	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	IX	4	17	4	120	68	22	46	34	18		+
· ·	X	3	13	4	90	52	18	34	20	12	6	
Total		7	30	8	210	120	40	80	54	30	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

#### **Knowledge:**

- 1. Etiology, epidemiology, pathogenesis, clinical manifestations, principles of diagnosis and treatment.
- 2. Differential diagnosis of somatic diseases from infectious diseases.
- 3. Basics of epidemiological control of infectious diseases.

# Abilities:

- 1. To organize purely therapeutic examinations and treatments of patients.
- 2. substantiate the choice of serological, bacteriological and immunological diagnosis in case of infectious diseases.

# Possessions:

- 1. On the causes of infectious diseases in humans and the objective patterns of their spread, as well as measures to combat epidemics.
- 2. Master preventive measures to prevent or reduce infectious diseases.
- 3. To master the ability to use pharmacological means for the treatment, recovery and prevention of various diseases and pathological conditions.

#### 2. BRIEF CONTENT OF THE COURSE

The course provides knowledge about infection, infectious process, infectious disease, studies the classification of infectious diseases, principles of diagnosis and treatment, viral hepatitis A, B, C, D, D, etiology, pathogenesis, clinical and epidemiological features, principles of diagnosis and treatment. Escherichiosis/food poisoning: etiology, pathogenesis, epidemiology, clinical description and classification, principles of diagnostics and treatment, Yersiniosis infections (intestinal yersiniosis, pseudotuberculosis): clinical description and classification, differential diagnosis, principles of diagnosis and treatment. Brucellosis: clinical and epidemiological features, clinical classification, principles of diagnosis and treatment. Salmonellosis, typhoid fever, paratyphoid fever A, B. Measles, Rubella. Infectious mononucleosis.

# 3. GOAL OF THE COURSE

The goal of the course is to teach students the etiology, epidemiology, pathogenesis, clinical manifestations, diagnosis and treatment principles of infectious diseases.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### **Know**

- K1. etiology, pathogenesis, epidemiological features of infectious diseases, pathognomonic symptoms.
- K2. be able to interpret and compare clinical and paraclinical data, make a preliminary clinical diagnosis, make a plan for additional research and treatment.

#### Be Able to

- A1. to fully examine the patient, prescribe the necessary laboratory-instrumental examinations, diet, treatment.
- A2. correctly interpret the data of laboratory-instrumental research.

#### **Possession**

P1 Organizing the work of all branches of laboratory services, all possible medical diagnostic works.

- 1. Chair material
- 2. И.А. БЕРЕЖНОВА Инфекционные болезни: Учеб. пособие. М.: РИОР,
- 3. 2007.-319 c.
- 4. Е. И. Змушко, Е. П. Шувалова "Инфекционные болезни", СпецЛит, Санкт-Петербург, 2015 г.
- CHANDY C. JOHN, "Advances in the Diagnosis and Treatment of Pediatric Infectious Diseases", USA, 2013; 542p.
- 6. Jonathan Cohen, Steven M Opal, William G Powderly "Infectious diseases", 3 Edition; Elsevier, 2010; 1990p.

6. ASSESSMENT COMPONENTS	POINT			
Attendances	16			
Assessment of knowledge acquisition	70			
Independent individual work	14			
7. ASSESSMENT SYSTEM /RATING / SYSTEM				
Mark Assessment Point Assessment				
UT 11 .U				

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	PUBLIC HEALTH A	ND HEALTHCARE		
TYPE OF COURSE	Mandatory			
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL			
	PROGRAM			
THE FORM OF TRAINING	Full-time			
PROFESSION	Doctor			
FACULTY	General Medicine			
COURSE	II, III	SEMESTER	IV,V	
ACADEMIC YEAR	2020-2021		•	

CREATOR	PhD Associate Professor Albert Danilov
	PhD Anna Sargsyan
	PhD Christine Hovhannesyan
PHONE	+374 94 06 12 20, +374 94 91 12 09, +374 94 02 68 58
EMAIL	anna.v.mnatsakanyan@gmail.com, kristgen@yahoo.com

CHAIR	Social Medicine
CLINICAL BASE	-
CHAIR HEAD	PhD Anna Ovchyan

Year	Semester	Credit	Academic Week	Hours/week	Total hours	Total auditory hours	Classroom hours	Practical, lab., hours	Independent work hours	Lecturer's consultation	Examination	Test
II	IV	2	15	3	60	45	16	29	9	6		+
III	V	3	17	3	90	51	22	29	27	12		+
Total		5	32	6	150	96	38	58	36	18		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# **Knowledge**:

- 1. Reactivity of microorganisms during the development of pathological processes, functional changes of organ systems during the main diseases of internal organs.
- 2. Knowledge about infection and immunity, the main role of infection in the ethiology of infectious-allergic diseases.

# Abilities:

- 1. Analyze biological phenomena and patterns of natural processes.
- 2. Explain the structure and functions of human organ systems.

### Possessions:

- 1. work with computer and spreadsheets.
- 2. work with literature.

### 2. BRIEF CONTENT OF THE COURSE

The course "Public Health and Healthcare" studies medical statistics, population health examination, morbidity and physical development examination, healthcare organization main principles, urban population preventive and treatment help organization, rural population medical help organization, industrial enterprises' workers medical-sanitary help organization, sanitary-epidemiological service organization, RA Ministry of Health system structure and system reform program, social insurance and social safety, working capability medical examination, immunoprevention main principles, neuropsychiatric, cardiovascular diseases, alcoholism, traumatism, tuberculosis, AIDS and malignant neoplasms as social problem, health economy important issues, WHO, hygienic education of the population.

# 3. GOAL OF THE COURSE

The goal of the course is to give students full professional idea on public effects on population health, based on which will be possible to make events to prevent and eliminate harmful conditions.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- K 1. Theoretical principles of public health organization.
- K 2. Principles of organizing medical-preventive care and sanitary-epidemiological service.
- K 3. Basics of organizing measures to prevent the adverse effects of social and environmental factors on the health of the population.
- K 4. Peculiarities of doctor's work in different medical, pediatric institutions and enterprises.
- K 5. The essence of the district and dispensary methods.

#### Be able to:

- A 1. Plan, analyze, assess the health status of the population, environmental factors affecting it.
- A 2. Participate in the process of organizing preventive, sanitary and hygienic aid to the population, taking into account its socio-professional, age-gender structure.
- A 3. Take preventive and sanitary measures.
- A 4. Use the technical equipment used for work management in healthcare in, use the databases.
- A 5. Analyze and evaluate electronic computing techniques used at different stages of processing employment records, reports and other information.

# Possess:

- P 1. The method of organizing a statistical research.
- P 2. Process research data.
- P 3. Analyze demographics of the population, indicators of illness, physical development, as well as temporary disability sheets.
- P 4. Calculate intensive and extensible coefficients.
- P 5. Evaluate the performance indicators of the inpatient and polyclinic.

- 1. Chair material
- 2. <a href="http://chsrd.aua.am/epi/eng/">http://chsrd.aua.am/epi/eng/</a>
- 3. A dictionary of epidemiology, 4th edition, John M. Last, 2001
- 4. Oxford Textbook of Public Health. Roger Detels, Robert Beaglehole, Mary Ann Lansang, and Martin Gulliford, 2011
- 5. Իսկոյան Ա.Բ., « ՀՀ Էկոլոգիական իրավունք», Եր., 2000թ.
- 6. Медик В.А., Юрьев В.С., "Общественное здоровье", М., 2003г.
- 7. Миняева В.А., Вишнякова Н.И., "Общественное здоровье и здравоохранение", М., 2006г.

- 8. Mahajan & Gupta; Textbook of Preventive and Social Medicine; 2013, Jaypee, London, 728p.
- 9. Лисицын Ю.П., "Общественное здоровье и здравоохранение", М., 2010г.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	INFECTIOUS DISEASES					
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	V	Semester	IX, X			
ACADEMIC YEAR	2020-2021					

CREATOR	Anahit Mkrtchyan, Arpine Arakelyan
PHONE	+374 93 59 04 66, +374 94 32 17 09
E-MAIL	an.mkrt@inbox.ru, arpi.arakelyan.89@mail.ru

CHAIR	Social medicine
CLINICAL BASE	Nork "Infectious Diseases Clinical Hospital
HEAD OF CHAIR	PhD Anna Ovchyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
v	IX	4	17	4	120	68	22	46	34	18		+
v	X	3	13	4	90	52	18	34	20	12	6	
Total		7	30	8	210	120	40	80	54	30	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# **Knowledge:**

- 4. Etiology, epidemiology, pathogenesis, clinical manifestations, principles of diagnosis and treatment.
- 5. Differential diagnosis of somatic diseases from infectious diseases.
- 6. Basics of epidemiological control of infectious diseases.

# **Abilities:**

- 3. To organize purely therapeutic examinations and treatments of patients.
- 4. substantiate the choice of serological, bacteriological and immunological diagnosis in case of infectious diseases.

# Possessions:

- 4. On the causes of infectious diseases in humans and the objective patterns of their spread, as well as measures to combat epidemics.
- 5. Master preventive measures to prevent or reduce infectious diseases.
- 6. To master the ability to use pharmacological means for the treatment, recovery and

prevention of various diseases and pathological conditions.

# 2. BRIEF CONTENT OF THE COURSE

The course provides knowledge about infection, infectious process, infectious disease, studies the classification of infectious diseases, principles of diagnosis and treatment, viral hepatitis A, B, C, D, D, etiology, pathogenesis, clinical and epidemiological features, principles of diagnosis and treatment. Escherichiosis/food poisoning: etiology, pathogenesis, epidemiology, clinical description and classification, principles of diagnostics and treatment, Yersiniosis infections (intestinal yersiniosis, pseudotuberculosis): clinical description and classification, differential diagnosis, principles of diagnosis and treatment. Brucellosis: clinical and epidemiological features, clinical classification, principles of diagnosis and treatment. Salmonellosis, typhoid fever, paratyphoid fever A, B. Measles, Rubella. Infectious mononucleosis.

#### 3. GOAL OF THE COURSE

The goal of the course is to teach students the etiology, epidemiology, pathogenesis, clinical manifestations, diagnosis and treatment principles of infectious diseases.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know

- K1. etiology, pathogenesis, epidemiological features of infectious diseases, pathognomonic symptoms.
- K2. be able to interpret and compare clinical and paraclinical data, make a preliminary clinical diagnosis, make a plan for additional research and treatment.

# Be Able to

- A1. to fully examine the patient, prescribe the necessary laboratory-instrumental examinations, diet, treatment.
- A2. correctly interpret the data of laboratory-instrumental research.

# **Possession**

P1 Organizing the work of all branches of laboratory services, all possible medical diagnostic works.

# 5. LITERATURE

- 7. Chair material
- 8. И.А. БЕРЕЖНОВА Инфекционные болезни: Учеб. пособие. М.: РИОР,
- 9. 2007.-319 c.
- 10. Е. И. Змушко, Е. П. Шувалова " Инфекционные болезни ", СпецЛит, Санкт-Петербург, 2015 г.
- 11. CHANDY C. JOHN, "Advances in the Diagnosis and Treatment of Pediatric Infectious Diseases", USA, 2013; 542p.
- 12. Jonathan Cohen, Steven M Opal, William G Powderly "Infectious diseases", 3 Edition; Elsevier, 2010; 1990p.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A

"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	EMERGENCY MEDICINE				
TYPE OF COURSE	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM				
THE FORM OF TRAINING	Full time				
PROFESSION	Doctor				
FACULTY	General Medicine				
COURSE	III	SEMESTER	VI		
ACADEMIC YEAR	2020-2021				

CREATOR	Gagik Mkrtchyan, Harutyun Hovhannisyan
PHONE	+374 91 19 55 13, +374 77 36 07 72
E-MAIL	gagik1129@gmail.com, hovhannisyan84@gmail.com

CHAIR	Social Medicine
CLINICAL BASE	-
HEAD OF CHAIR	PhD Anna Ovchyan

Year	Semester	Credit	Academic week	Week hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
III	VI	3	15	3	90	45	18	27	29	16		+
Total		3	15	3	90	45	18	27	29	16		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- 1. Structural levels of human organs, organ-systems and organism.
- 2. the anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and sick organism;
- 3. about the causes of the emergence of infectious diseases in humans and the objective patterns of their spread, as well as measures to combat epidemics.
- 4. on physical systems consisting of physical devices and beams, medical diagnostic equipment and technology.
- 5. complex emergency medical activity, which is shown to a suddenly ill or injured citizen, at the scene and when transporting to a medical facility.

# **Abilities:**

- 1. to perform physical examinations of a living person: palpation, percussion, auscultation and general examination.
- 2. to perform and evaluate the results of electrocardiography, measure and evaluate respiration rate and body temperature, evaluate hematological findings;
- 3. be able to work with medical equipment, based on the basics of medical physics.

# 2. BRIEF CONTENT OF THE COURSE

The subject "Emergency medicine" studies:

- -Emergencies, their characteristics, classification and ways and measures of prevention.
- -Medical-strategic characteristics of affected foci arising in peacetime and wartime emergencies
- -Ways and measures of providing of medical care to the population in peacetime and wartime emergencies.
- -Peculiarities of medical aid organization in therapeutic type affected in the stages of medical evacuation in an emergency.
- -Peculiarities of aid organization in surgical type affected in the stages of medical evacuation in an emergency.
- -Organization of sanitary-hygienic and anti-epidemic measures of the population in in an emergency.
- -Organization of medical institutions work in an emergency.

### 3. GOAL OF THE COURSE

The goal of the course is to give students knowledge about emergencies classification, ways of prevention, organization of medical care for a population in an emergency, medical care during various operations, as well as the peculiarities of the organization of therapeutic and surgical patients assistance in the stages of medical evacuation.

# 4.EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1. Emergency classification, characteristics, prevention.
- K2. Ways, tasks, main ways of protecting the population in peacetime and wartime emergencies.
- K3. Peculiarities of aid organization in therapeutic and surgical affected in the stages of medical evacuation in an emergency.

#### Be able:

- A1. Organize the sanitary-hygienic and anti-epidemic measures of the population in an emergency situation.
- A2. Carry out medical triage and evacuation of the affected.
- A3. Design of the medical-strategic characteristics of affected foci arising in peacetime and wartime emergencies.

#### Possess:

- P1. Providing various types of medical care in peacetime and wartime emergencies.
- P2. Carring out a medical sorting.
- P3. Carring out the san-hygienic measures.
- P4. Application of radiological and chemical situation assessment methods, use of personal protective equipment, chemical and radiological examination devices.

- 1. Chair material
- 2. Ս.Ազատյան, Ա. Չատինյան, Մ. Ղազարյան, Ս. Դանիելյան «Ծայրահեղ իրավիձակներում անվտանգ կենսագործունեություն և գոյատևման գաղտնիքները», Երևան, 2006թ.
- 3. «Արտակարգ իրավիձակներ և բնակչության պաշտպանությունը» -ուսումնամեթոդական ձեռնարկ
- 4. Левчук И.П., Третьяков Н.В., Медицина катастроф, курс лекций, М., ГЭОТАР- медиа, 2011, 240ц.
- 5. И. И. Сахно, Медицина катастроф, М., 2002, 560с
- 6. Disaster medicine, editor-in-chief, Gregory R. Ciottone; Third Edition, ELSEVIER, 2006, 969p.
- 7. Koenig and Schultz's Disaster Medicine: Comprehensive Principles and Practices; Cambridge

University Press, 2009, 708p	•						
6. ASSESSMENT COMPONENTS							
Attendances							
Assessment of knowledge acquisition, abilities and skills							
Independent individual work							
7. ASSESSMENT SYSTEM /RATING / SYSTEM							
Mark	Assessment Point	Assessment letter					
"Excellent"	96-100	A+					
	90-95	A					
"Good"	80-89	B+					
	70-79	В					
"Satisfactory"	60-69	C+					
	51-59	С					
"Unsatisfactory"	50 and below	D					
"Tested"	≥51	S					
"Untested"	< 51	U					

NAME OF THE COURSE	PROPAEDUTICS OF INTERNAL DISEASES					
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	III SEMESTER V, VI					
ACADEMIC YEAR	2020-2021					

CREATOR	PhD Ara Arshamyan, Harutyun Hovhannisyan, Marieta
	Davidyan
PHONE	+374 98 90 59 01, +374 77 36 07 72, +374 91 60 39 03
E-MAIL	Aradoc1983@mail.ru,hovhannisyan84@gmail.com,
	maradavidyan@gmail.com

CHAIR	Therapeutic subjects
CLINICAL BASE	"Surb Grigor Lusavorich" MC
HEAD OF CHAIR	PhD Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
TTT	V	5	17	6	150	102	42	60	30	12	6	
III	VI	5	15	5	150	75	30	45	57	12	6	
Total		10	32	11	300	177	72	105	87	2	12	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge:**

Individual features of the anatomic-physiological and age-sex structure and development of healthy and sick organisms, the structure, topography and development of cells, tissues, organs and systems, cooperation of their functions in normal and pathological conditions, organ changes and population feature at the levels of life formation.

Functional systems of the human body, their regulation and self-regulation under the influence of the external environment in normal and pathological conditions.

Ability to express substance concentration in solutions, ability to prepare solutions of various concentrations.

The basic laws of physics, the physical phenomena and patterns underlying the basic processes in human body. Characteristics of physical factors affecting the human organism and biophysical mechanisms of action.

Moral and ethical standards, rules and principles of professional medical behavior, patient's and

doctor's rights, moral fundamentals of modern medical practice, doctor's responsibilities and the role in society.

The basic moral documents of international organizations.

National and international professional medical associations.

The basic areas of psychology, general and individual characteristics of the adult and the teenager, the psychology of a person /individum/ and small groups.

## Abilities:

- 1. To palpate main bony landmarks on a subject, to know anatomical features of organs and organsystems, the direction and contours of main neurovascular bundles.
- 2. To avail physical, chemical and biological equipments.
- 3. Ability to use educational, scientific, popular scientific literature and Internet for professional activity.
- 4. To make and to keep working relationships with other members of the staff.
- 5. Data analysis of common functional diagnositic methods applied for revealing human organs and organ-systems pathology.

## Possessions:

- 1. Medical-anatomical concepts.
- 2. Skills of informing the patients and their relatives according to the request of informed consent rule.

## 2. BRIEF CONTENT OF THE COURSE

The course "Propaedeutics of internal diseases" includes the following sections: Physical diagnosis, Laboratory and instrumental methods of research, Functional diagnosis, Special pathology

## 3. GOAL OF THE COURSE

The goal of the course is to teach the symptoms, etiology, subjective and objective examinations, clinical and paraclinical methods of diagnosis, evaluate the results and the justifications and principles of confirming the disease diagnosis.

# 4. EDUCATIONAL RESULTS. At the end of the course, the student must

## Know:

- **K1.** the etiology, pathogenesis, preventive measures of most common diseases, contemporary classification of diseases,
- **K2.** the clinical picture, course characteristics and possible complications of typical forms of most common diseases in various age groups,
- **K3.** diagnostic methods, diagnostic options (capabilities) of therapeutical, surgical and infectious profile patient's direct examination, modern clinical, laboratory, instrumental methods of patients' examination (including endoscopic, radiological methods, ultrasound),
- **K4.** diagnostic criteria of various diseases.

## Be able to:

- **A1.** Evaluate patient's condition, take a history, perform inquiring /conduct a survey/ of the patient or his/her relatives, perform physical examination of the patient (inspection, palpation, auscultation, BP measurement, arterial pulse characteristics, etc.), evaluate patient's condition in order to determine the need of providing emergency medical care /aid/, to perform a primary examination of organs and systems: nervous, endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs, digestive, urinary, reproductive, musculoskeletal and articular, eyes, ears, throat, nose /ENT/.
- **A2.** to determine the number of additional investigations for: evaluation of the disease outcome, the confirmation of diagnosis and obtainment of reliable results,

- A3. formulate a clinical diagnosis,
- A4. make an initial diagnosis,
- **A5.** provide first aid in emergency situations,
- **A6.** fill in case history.

## Possess:

- P1. correct methods of medical documents management,
- P2. general clinical examination methods,
- P3. decoding of results /data/ of laboratory, instrumental investigations,
- **P4.** the algorithm of making an initial diagnosis, followed by referring the patient to the appropriate (medical) specialist,

## 5. LITERATURE

- 1. Chair material
- 2. Գ.Հ. Բադալյան, «Ներքին հիվանդությունների պրոպեդևտիկա», Երևան, 1988թ.
- 3. Գ.Ս. Իսախանյան, Ա.Մ. Սարգսյան, «Ներքին հիվանդությունների պրոպեդևտիկա», Երևան, 1996թ.
- 4. Ձ.Տ. Ջնդոյան «Ներքին հիվանդությունների պրոպեդևտիկա»։ Ուսումնական ձեռնարկ, Երևան ԵՊԲՀ, 2016, 544 էջ։
- 5. Пропедевтика внутренних болезней. Гребенев А. Л., 6-е изд. М., 2005.
- 6. Окороков А.Н., "Диагностика внутренних болезней", Москва, 2003 г.В. Ashar, R.
- 7. B. Walter and others, Davidson's Principles and Practice of Medicine, 22nd Edition, Amsterdam, 2014
- 8. D. Kasper, A. Fauci and others, Harrison's Principles of Internal Medicine, 19th Edition, New York, 2015
- 9. Mayo Clinic Internal Medicine Internal Medicine Board Review, Mayo clinic press Amsterdam, 2015

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	INTERNAL DISEASE	ES				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	IV - VI	SEMESTER	VII - XII			
ACADEMIC YEAR	2020-2021					

CREATOR	PhD Ara Arshamyan, Lilit Sukiasyan, Harutyun Hovhannisyan,
	Marieta Davidyan
PHONE	+374 98 90 59 01, +374 94 63 81 01, +374 77 36 07 72, +374 91 60
	39 03
E-MAIL	Aradoc1983@mail.ru,mansus73@gmail.com,
	hovhannisyan84@gmail.com, maradavidyan@gmail.com

CHAIR	Therapeutic subjects
CLINICAL BASE	"Surb Grigor Lusavorich" MC
HEAD OF CHAIR	PhD Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
IV	VII	6	17	6	180	102	34	68	51	21	6	
1 V	VIII	5	13	6	150	78	34	44	54	12	6	
V	IX	4	17	4	120	68	20	48	34	12	6	
V	X	3	13	4	90	52	20	32	20	12	6	
VI	XI	4	17	4	120	68	26	42	34	18		+
VI	XII	3	17	4	90	68	26	42	4	18	S. E.	
Total		25	94	28	750	436	160	276	197	93	24	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge:**

- 1. Ethics and deontology in medicine, taking into account the characteristics of sick organism, the laws of dialectical materialism in medicine.
- 2. Individual features of the anatomical-physiological and age-sex structure and development of healthy and sick organisms, the structure, topography and development of cells, tissues, organs and systems, the cooperation of their functions in normal and pathological conditions, organ changes and population characteristics at the levels of life formation.
- 3. The microstructure of human body tissues and cells.

- 4. Study of metals, microelements, homeostasis maintaining buffer systems with a certain biological role in human activity,
- 5. The basic laws of physics, the physical phenomena and patterns underlying the basic processes in human body. Characteristics of physical factors affecting human organism and biophysical mechanisms of action.
- 6. The main metabolic processes in the body to detect disorders of protein, carbohydrate and lipid metabolism, the main biochemical parameters of blood for the evaluation of the state of protein, carbohydrate and lipid metabolism; knowledge about the involvement of various organ-systems in metabolism to detect pathologies of the liver, gastrointestinal system, kidneys, cardiovascular system.
- 7. Functional systems of human body, their regulation and self-regulation by the exposure of external environment in normal and pathological conditions.
- 8. Knowledge about the infection and immunity, about the infection role in the etiology of main infectious and infectious-allergic diseases.
- 9. Basic knowledge about immunity, its types, expression forms. The role of immunity during the infectious process. Characteristics of humoral immunity main reactions.
- 10. Morphological changes in internal (organs) diseases, various clinical anatomical variants of diseases, complications of acute and chronic processes of all nosological forms.
- 11. The reactivity of microorganisms in development of pathological processes, functional changes of organ-systems during the common diseases of internal organs.
- 12. Clinical methods of therapeutic patients' examination. Laboratory and Instrumental investigation of patients (temperature measurement, spirometry, measurement of BP, venous pressure, detection of blood flow velocity, gastric and duodenal probing, examination of the sputum, blood, urine, stools, gastric juice, ECG performance). Theoretical notion of main laboratory-Instrumental investigations conducted by specialists (endoscopy, radioisotope scan, ECG, phonocardiography, echocardiography, biopsy, sternum puncture data, testing the respiration function). The common clinical symptoms of respiratory, cardiovascular, digestive, hepatic, renal, hematological, musculoskeletal system diseases and the ability to group the typical syndromes. Compiling the patient's examination data in the form of a medical history.
- 13. Diagnosis of pulmonary tuberculosis based on history, clinical and radiological examination data. Evaluation of Mantoux and Pirquet's tuberculin tests based on local reaction, clinical and immunological tests.
- 14. Detection of lung diseases (pneumonia, lung emphysema, pneumosclerosis, atelectasis, lung cancer) via X-ray. X-ray detection of heart chambers hypertrophy, changes of aorta. The detection of typical changes in gastric and duodenal ulcer disease and chronic cholecystitis. Detection of characteristic changes in pathologies of thyroid gland, liver, kidneys by radioisotope examination.
- 15. Pharmacokinetics of main medications used in common diseases of internal organs, indications for their prescription. Side effects of medications.

## **Abilities:**

- 1. To palpate main bony landmarks on a subject, to know the anatomical features of organs and organ-systems, the direction and contours of main neurovascular bundles.
- 2. Ability to use educational, scientific, popular scientific literature and Internet for professional activity.
- 3. Analysis of the results of the most common methods of functional diagnostics used to detect

- the pathology of blood, heart and vessels, kidneys, liver and other organs and systems.
- 4. Detect and evaluate the data of ECG, spirometry, thermometry and hematological indicators.
- 5. To distinguish the normal level of metabolites (glucose, urea, bilirubin, uric acid, lactic acid, pyruvic acid, etc.) in blood serum from pathological changes, read the proteinogram and explain the significance of deviations.
- 6. Explain the data of enzymological study of blood plasma.

#### Possessions:

- 1. Medical-anatomical concepts.
- 2. Basic methods of patient's care and basic nursing manipulations.
- 3. Clinical and some instrumental methods of therapeutic patients' examination.

## 2. BRIEF CONTENT OF THE COURSE

The "Internal Diseases" educational course is the basis for the clinical training of every practicing physician. Forms the basics of clinical logic, important basics of direct examination of the patient, analysis and decoding of many modern instrumental and laboratory research results. It studies cardiovascular diseases, diseases of the respiratory system, diseases of the gastrointestinal tract, endocrine diseases, diseases of the urinary system, studying the clinical expressions of the diseases and giving an explanation for the emergence of separate mechanisms of pathological symptoms and syndromes. Also studies the use of modern medicine, indications and contraindications, mechanisms of action.

## 3. GOAL OF THE COURSE

The goal of the course is to prepare medical graduates who can carry out preventive, diagnostic, therapeutic, educational, organizational, research activities.

## 4. EDUCATIONAL RESULTS. At the end of the course, the student must

## Know:

- **K1.** The etiology, pathogenesis, preventive measures of most common diseases, contemporary classification of diseases.
- **K2.** The clinical manifestations, course characteristics and possible complications of most common diseases typical forms in various age groups.
- **K3.** The methods of diagnosing a patient with a therapeutic profile, diagnostic capabilities of patient's direct examination methods, clinical, modern laboratory, instrumental methods of examining patients (including endoscopic, radiological methods, ultrasound diagnostics).
- **K4.** Diagnostic indicators of various diseases.
- **K5.** Clinical and pharmacological characteristics of main groups of medications and the rational selection of specific agents in main pathological syndromes of diseases and emergency situations in patients, including the basics of anti-stimulant legislation.

## Be able to:

**A1.**participate in the organization and provision of preventive medical assistance to the population based on its social-professional and age-sex structure,

**A2.** evaluate the patient's condition: to taka a history, conduct a survey of the patient and/or his relatives, perform a physical examination of the patient (inpection, palpation, auscultation, BP measurement, assessment of arterial pulse characteristics, etc.), evaluate the patient's condition for the determination of need to provide them with medical care, to perform a primary examination of organs and systems: endocrine, immune, respiratory, cardiovascular, blood and hematopoietic (organs),

digestive, urinary, musculoskeletal and articular,

- **A3.** assess the social factors affecting patient's physical and mental health: cultural, ethnic, religious, individual, family, social risk factors (unemployment, violence, sickness and death of relatives), make an initial diagnosis,
- **A4.** compile the volume of additional examinations to confirm the diagnosis and obtain a reliable result according to the disease outcome,
- **A5.** choose the type of personal care for the treatment of the patient: primary care, emergency care, hospitalization,
- A6. formulate a clinical diagnosis,
- A7. develop a plan of therapeutic activity, taking into account the disease course and treatment,
- **A8.** formulate the indications for the selected treatment method, taking into account etiotropic and pathogenetic means, to justify pharmacotherapy for a specific patient in main pathological syndromes and urgent conditions, to select the route of administration, the regimen and dose of medications products, to evaluate the effectiveness and safety of conducted treatment,
- **A9.** apply different methods of medication administration, make a preliminary diagnosis, compare information about the patient for detecting the pathology and its causes,
- **A10.** apply primary and secondary prevention methods (based on evidence-based medicine) in medical practice, detection of cause-and-effect relationship of health status changes depending on the impact of environmental factors.

## Possess:

- **P1.** general clinical examination methods,
- **P2.** the analysis of laboratory, instrumental investigation data,
- P3. algorithm of the clinical diagnosis location,
- **P4.** the algorithm of making an initial diagnosis with further referring the patient to the appropriate (medical) specialists.
- **P5.** first aid performance and basic (medical) diagnostic and therapeutic measures in life-threatening conditions.

## 5. LITERATURE

- 1. Chair material
- 2. Է. Նազարեթյան, Ա. Գասպարյան, Ներքին հիվանդություններ, Երևան, 2004
- 3. Հ. Մաթևոսյան, Թոքաբանության դասընթաց, Երևան, 2003
- 4. Ռ. Ստամբոլցյան, Լ. Միքայելյանց, Լ. Շուշանյան, Ներքին հիվանդություններ, Ռ. Ստամբոլցյանի ընդհանուր խմբագրությամբ, Երևան, 1988
- 5. Վ. Հարությունյան, Ե. Միքայելյան, Է. Կոտոյան, Ներքին հիվանդություններ, Երևան, 2000
- 6. А. Окороков, дагностика шнутренних болезней, Москва, 2003
- 7. А. Струтынский, А. Баранов, Г. Ройтберг, Ю. Галоненков, Основы семиотики заболеваний внутренних органов, Атлас, Москва, 2005
- 8. А. Струтынский, Г. Ройтберг, Внутренныые болезни, Основы семиотики заболеваний внутренних органов, Атлас, Москва, 2003
- 9. В. Милькаманавич, Атлас клинического исследования, учеб. пособие, Москва, 2006
- 10. B. Walter and others, Davidson's Principles and Practice of Medicine, 22nd Edition, Amsterdam, 2014
- 11. D. Kasper, A. Fauci and others, Harrison's Principles of Internal Medicine, 19th Edition, New York, 2015

- 12. Davidson's Principles &Practice of Medicine 22nd Edition: Brian R. Walker, Nicki R. Colledge, Stuart H. Ralston, Ian D. Penman
- 13. Harrison's Principles of Internal Medicine 19th Edition: Kasper, Fauci, Hauser, Longo, Jameson, Loscalza
- 14. 100 cases in Clinical Medicine Second Edition: P. J Harrison's Gastroenterology and Hepatology

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

#### 7. ASSESSMENT SYSTEM /RATING / SYSTEM Assessment letter Mark Assessment Point "Excellent" 96-100 A+ 90-95 A "Good" 80-89 B+ 70-79 В "Satisfactory" 60-69 C+51-59 C "Unsatisfactory" 50 and below D "Tested" ≥51 S "Untested" < 51 U

NAME OF THE COURSE	ENDOCRINOLOGY					
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM					
THE FORM OF TRAINING	Full time	Full time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine	General Medicine				
COURSE	VI SEMESTER XI					
ACADEMIC YEAR	2020-2021					

CREATOR	Nvard Arabian
PHONE	+374 93 89 56 22
E-MAIL	arabjannvard@gmail.com

CHAIR	Therapeutic subjects
CLINICAL BASE	"St. Grigor Lusavorich" MC
HEAD OF CHAIR	Ph.D. Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XI	2	17	2	60	34	14	20	17	9		+
Total		2	17	2	60	34	14	20	17	9		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## Knowledge:

- 1. Ethics and deontology in medicine, taking into account the characteristics of the sick organism, the laws of dialectical materialism in medicine.
- 2. Individual features of the anatomiophysiological and age-sex structure and development of healthy and diseased organisms, the structure, topography and development of cells, tissues, organs and systems, cooperation of their functions in normal and pathological conditions, organ changes and population features at the levels of life formation.
- 3. The microstructure of tissues and cells of the human body.
- 4. Study of metals, microelements with a certain biological role in human activity, buffer systems maintaining poststasis.
- 5. The basic laws of physics, the physical phenomena and patterns underlying the main processes in the human body. Characteristics of physical factors affecting the human body and biophysical mechanisms of influence.
- 6. The main metabolic processes in the body to detect disorders of protein, carbohydrate and fat metabolism, the main biochemical indicators of blood for the assessment of the state of protein, carbohydrate and fat metabolism, knowledge about the participation of various organ systems in metabolism to detect pathologies of the liver, gastrointestinal system, kidneys, cardiovascular

system

- 7. Functional systems of the human body, their regulation and self-regulation under the influence of the external environment in normal and pathological conditions.
- 8. Knowledge about infection and immunity, the role of infection in the etiology of major infectious and infectious-allergic diseases.
- 9. Basic knowledge of immunity, its types of expression. The role of immunity during the infectious process. Characteristics of the main reactions of humoral immunity.
- 10. Morphological changes during diseases of internal organs, different clinico-anatomical variants of diseases, complications of acute and chronic processes of all nosological forms.
- 11. The reactivity of microorganisms during the development of pathological processes, functional changes of organ systems during the main diseases of internal organs.
- 12. Clinical methods of examining therapeutic patients. Laboratory and instrumental examination of patients (temperature measurement, spirometry, blood pressure, venous pressure measurement, determination of blood flow rate, gastric and duodenal probing, examination of sputum, blood, urine, feces, gastric juice examination, ECG). Theoretical understanding of the main laboratory-instrumental examinations conducted by specialists (endoscopy, radioisotope examination, ECG, phonocardiography, echocardiography, biopsy, sternum puncture data, examination of the function of external respiration), respiratory, blood supply, digestive systems, liver, kidneys, blood system, musculoskeletal the main clinical symptoms in system diseases and the ability to group their typical syndromes. Compiling the patient's examination data in the form of a medical history. Master the basic techniques of patient care and be able to perform basic nursing manipulations.
- 13. Diagnosis of tuberculosis of respiratory organs on the basis of anamnesis, clinical, radiological examination data. Evaluation of Mantou's and Pirke's tuberculin experiments on the basis of local reaction, clinical, immunological tests.
- 14. Detection of lung diseases during X-ray examination (pneumonia, emphysema, pneumosclerosis, atelectasis, lung cancer). X-ray recognition of hypertrophy of the heart sections, changes in the aorta. Gastric and duodenal ulcer disease, detection of changes characteristic of chronic cholecystitis. Detection of changes characteristic of pathologies of the thyroid gland, liver, kidneys during radioisotope examination.
- 15. Pharmacokinetics of the main medicinal preparations used in the main diseases of internal organs, indications for their appointment. Side effects of medications.

## **Abilities**

- 1. touch the main bone orientations on a person, draw the topographical contours of the main vascular and nerve trunks of the organs;
- 2. Ability to use educational, scientific, popular scientific literature and the Internet for vocational activity.
- 3. Analysis of the results of the most common methods of functional diagnostics used to detect pathology of blood, heart and vessels, kidneys, liver and other organs and systems.
- 4. Determine and evaluate the results of ECG, spirography, thermometry, hematological indicators.
- 5. Distinguish between normal indicators of metabolite levels in blood serum (glucose, urea, bilirubin, uric acid, lactic acid, pyrochloric acid, etc.) from pathological changes, read the proteinogram and explain the significance of the differences. Explain the data of enzymological examination of blood serum.

## **Possessions**

- 1. Collection of the patient's anamnesis.
- 2. Physical studies of an alive person.

## 2. BRIEF CONTENT OF THE COURSE

The course "Endocrinology" belongs to the module of clinical courses and the course of therapy. It studies the structure of endocrine glands, functional abnormalities, and the most common diseases.

## 3. GOAL OF THE COURSE

The goal of the course is to give students knowledge about endocrine glands, their role and function regulation mechanisms, endocrine gland diseases, their early detection, research, diagnosis, differential diagnosis, modern methods of treatment.

## 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

## Know

- K1. the main symptoms of endocrine gland disorders,
- K2. diagnostic features of endocrine diseases
- K3. the most complete ways of treating endocrine diseases
- K4. principles of dispensation of endocrine patients,

## Be able to

A1. Interpretation the results of laboratory and instrumental research.

#### **Possess**

- P1. external examination of endocrine patients, physical examination, anamnesis collection,
- P2. to check glucose with a glucometer,
- P3. insulin injection dosages and techniques.

## 5. LITERATURE

- 1. Chair material.
- 2. Պ.Ա. Վարդապետյան, «Էնդոկրինոլոգիա», Երևան, 1988 թ.
- 3. Գ. Գ. Գևորգյան, «Կլինիկական էնդոկրինոլոգիայի հիմունքները», Երևան, 1982թ.
- 4. Шабалов Н.П., "Диагностика и лечение эндокриных заболеваний у детей и подростков", Москва, 2003 г.
- 5. Лавин Н., "Эндокринология", Москва, 1999 г.
- 6. J. L. Jameson, Harrison's Endocrinology, New York, 2010
- 7. John Wass, Oxford handbook of endocrinology anddiabetes; Third edition; 2009.

9,	
6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	PHTHISIOLOGY						
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	V SEMESTER X						
ACADEMIC YEAR	2020-2021						

CREATOR	Marjik Hovhannisyan, Ernest Sargsyan
PHONE	+374 77 07 47 20, +374 98 08 07 96
E-MAIL	drser92@gmail.com

CHAIR	Social Medicine
CLINICAL BASE	"St. Grigor Lusavorich" MC
HEAD OF CHAIR	PhD Anna Ovchyan

Year	Semester	Credit	Academic week	Week hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	X	5	13	6	150	78	32	46	54	18		+
Total		5	13	6	150	78	32	46	54	18		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## Knowledge:

- 1. At the levels of human organs, organ-systems and organism.
- 2. anatomical-physiological, sex-age and individual features of the structure and development of a healthy and sick organism;
- 3. etiology, pathogenesis, clinic, diagnosis of internal diseases
- 4. features and the most complete method of treatment.
- 5. knowledge of radiodiagnostic methods, and based on this, choosing the appropriate method for detecting tumors of different origin and location, correct interpretation of examination results.
- 6. about the causes and objective patterns of spread of infectious diseases among people, as well as the measures to fight against epidemics.
- 7. knowledge of medical deontology, the most important aspects of the ethics of the doctorpatient relationship

## Abilities:

- 1. perform physical examinations of a living person, such as palpation, percussion, auscultation.
- 2. determine and evaluate the results of electrocardiography, spirometry and thermometry, hematological indicators;
- 3. to arrange purely therapeutic examinations and treatments of patients.

## Possessions:

1. accurate collection of anamnesis, data collection, analysis

## 2. BRIEF CONTENT OF THE COURSE

The "Phthisiology" course examines the epidemiology and pathogenesis of tuberculosis, immunity and allergy in tuberculosis, tuberculin diagnosis, anti-tuberculosis vaccinations, classification of tuberculosis, pathogenesis and clinical forms of primary tuberculosis, differential diagnosis, miliary and disseminated pulmonary tuberculosis, tuberculous and infectious meninges. tuberculosis, pulmonary tuberculosis, pulmonary tuberculosis, cavernous and fibrocavernous tuberculosis, cirrhotic tuberculosis, differential diagnosis, tuberculous pleurisy, differential diagnosis, pathogenesis of extrapulmonary tuberculosis, tuberculosis of peripheral lymph nodes, abdominal, genitourinary organs, detection, detection, prevention, treatment of tuberculosis, the connection with the general network, with the pulmonology service,

## 3. GOAL OF THE COURSE

The goal of the course is to teach tuberculosis epidemiology, etiopathogenesis, clinical classification, diagnostic methods, differential diagnosis, treatment, prevention and control.

## 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1. Epidemic indicators of tuberculosis, methods of detection, pathogenesis, immunity and allergy during tuberculosis.
- K2. Clinical signs of pulmonary tuberculosis, treatment.
- K3. The main links of activity of anti-tuberculosis institutions, the connection with the general medical network

#### Be able:

- A1. Analyze the results of x-ray and other radiological examination of tuberculosis (fluorography, roentgenoscopy, roentgenography, tomography, computer tomography).
- A2. Use other methods of differential diagnosis.

### Possess:

- P1. To the microscopic detection of the causative agent of tuberculosis by the Zilh-Neelsen method, the culture method
- P2. Clinical examination of tuberculosis patients / anamnesis, physical examination, analysis of laboratory and instrumental research data, application of tuberculin experiments.

## 5. LITERATURE

- 1. Chair material
- 2. Մ. Սաֆարյան, Ֆտիզիատրիայի հիմունքները, Երևան, 2010
- 3. Մ. Մաֆարյան, Ֆտիզիատրիայի մասնավոր հարցեր, Երևան, 2015

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unatisfactory"	50 and below	D
"Tested"	≥ 51	S
"Untested"	< 51	U

NAME OF THE COURSE	PHYSIOTHERAPY					
TYPE OF COURSE	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	VI SEMESTER XI					
ACADEMIC YEAR	2020-2021					

CREATOR	PhD Eleonora Minasyan, PhD assistant professor T.Petrosyan
PHONE	+374 93 36 77 62, +374 93 73 45 79
E-MAIL	tigpetrosyan@mail.ru

CHAIR	"Traditional medicine named after E. Minasyan"
CLINICAL BASE	SMTC
HEAD OF CHAIR	PhD Eleonora Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XI	2	17	2	60	34	16	18	17	9		+
Total		2	17	2	60	34	16	18	17	9		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge**

- the effect of various physical factors on the organism,
- the mechanism of influence of physical factors,
- therapeutic indications and contraindications of physical factors during each form of inflammation.

## **Abilities**

- Apply different types of physiotherapeutic means and equipment.
- Make a plan for physiotherapy treatment of patients.
- Assign and apply physiotherapy treatment in the general treatment complex.

## **Possessions**

- the general procedure for working with devices,
- safety rules of equipment in physiotherapy offices,
- the technique of performing the procedure.

## 2. BRIEF CONTENT OF THE COURSE

The "Physiotherapy" course examines treatment with high-frequency alternating current and high-frequency electromagnetic fields, magnetotherapy, the use of physiotherapy in a therapeutic complex, the stages of treatment in different regions of diseases (acute, subacute and chronic and as a

prophylactic measure), thermotherapy (paraffin, ozokerite, clay, sand, therapeutic muds), hydrotherapy and balneotherapy, therapeutic inhalations and climate therapy.

## 3. GOAL OF THE COURSE

The goal of teaching the subject "Physiotherapy" is to provide theoretical knowledge on the forms and methods of physiotherapy treatment, to improve practical skills and abilities.

## 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

## **Know**

- **K1.** the effect of various physical factors on the organism,
- **K2**. the mechanism of influence of physical factors,
- **K3.** therapeutic indications and contraindications of physical factors during each form of inflammation.

## Be able to

**A1.** use different types of physiotherapeutic means and equipment.

#### **Possess**

- **P1.** the general procedure for working with devices,
- P2. safety rules of equipment in physiotherapy offices,
- **P3**. to the technique of performing the procedure.

## 5. LITERATURE

- 1. Chair material.
- 2. V Robertson, A Ward, J Low and A Reed. Electrotherapy Explained: Principles and Practice. 2006 Elsevier, P 564
- 3. J Fox and T Sharp. Practical Electrotherapy: A Guide to safe Application. May 2007. P 256 Elsevier
- 4. Tim Watson Ethne Nussbaum. Electrophysical Agents 13th Edition. 2020, Elsevier P 432
- 5. Jan Bjordal. Clinical Electrotherapy: Your Guide to Optimal Treatment. 2001, Prima Books. P 178
- 6. V. S. Ulashchik, I. V. Lukomsky\_General physiotherapy, 2005.
- 7. Gafiyatullina G.Sh., Omelchenko V.P. Physiotherapy 2010
- 8. V. M. Bologolyubov, "Physiotherapy and balneology", Moscow, 2009.
- 9. Private physiotherapy, Ponomarenko G. 2005.
- 10. Ushakov. Practical Physiotherapy, 2009
- 11.A.A. Charkin, V.S. Ulashchin, "Ultrasound therapy", Moscow, 1983
- 12. V. S. Ulashchik, "Physiotherapy", Universal Medical Encyclopedia, Minsk, 2008.
- 13. V.V. Orzhoshkovsky, "Clinical Physiotherapy", Moscow, 1984.
- 14. V.G. Yasnogorodsky, "Electrotherapy", 1987
- 15. V.M. Bogolyubov, "Physiotherapy and balneology", Moscow, 1999
- 16. V.S. Ulashchin, "Physical-pharmacological methods of treatment and prevention", Moscow, 1979.
- 17.N.N. Sosina, "Physiotherapeutic Handbook", Moscow, 1999
- 18.G.K. Mkrtchyan, "Physiotherapy", Yerevan, 1962.7.2.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

3.5.1		
Mark	Assessment Point	Assessment letter

"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	PHYTOTHERAPY				
TYPE OF COURSE	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM			
THE FORM OF TRAINING	Full time	Full time			
PROFESSION	Doctor				
FACULTY	General Medicine				
COURSE	V	SEMESTER	IX		
ACADEMIC YEAR	2020-2021				

CREATOR	PhD Roman Hovsepyan, Nelly Ghukasyan
PHONE	+374 55550529, +374 55494149
E-MAIL	roman.hovsepyan@yahoo.com, nellka2011@gmail.com

CHAIR	"Traditional medicine named after E. Minasyan"
CLINICAL BASE	SMTC
HEAD OF CHAIR	PhD Eleonora Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	IX	3	17	3	90	51	26	25	21	18		+
Total		3	17	3	90	51	26	25	21	18		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge**

- about human's normal physiology,
- about the most common pathological conditions of a person,
- about the characteristics and mechanisms of action of some medicinal raw materials,
- about life and some living organisms, their life activity and evolution,
- about the spelling and pronunciation of the Latin names of pharmaceutical preparations, the basic laws for writing prescriptions,
- about galen pesticides

## **Abilities**

• analyze biological phenomena and patterns of natural processes.

## **Possessions**

• Principles of prescribing.

## 2. BRIEF CONTENT OF THE COURSE

The "Phytotherapy" course examines the bioactive substances contained in medicinal plants, medicinal plants with a calming and pain-relieving effect on the nervous system, stimulating effects, medicinal plants acting in the region of nerve synapses, possessing anti-atherosclerotic effects, containing cardiac glycosides, affecting the respiratory system, the mechanisms of their pharmacological effects, indications., contraindications, herbs with expectorant and broncholytic effects.

## 3. GOAL OF THE COURSE

The goal of the course is to teach future doctors the theoretical and scientific foundations of herbal medicine, which is the basis of folk (traditional) medicine, in order to combine and integrate it with modern medicine during further medical activities.

## 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

#### Know

- **K1.** Herbal medicine terms
- **K2**. The most common poisonous plants
- **K3**. Possible interactions of the most commonly used herbs and medicine,
- **K4**. At least several dozen herbs, their main medicinal properties, ways of use and dosages.

## Be able to

- **A1.** Understand the names and descriptions of herbal medicines,
- **A2**. Apply reference literature on phytotherapy,
- A3. Prepare herbal remedies.

## **Possess**

- **P1.** The principles of traditional and modern herbal medicine,
- **P2.** Safety rules, options, means and dosages for the use of herbal medicines for adults and children,
- **P3.** To the herbal treatment methods of the main pathological conditions and systemic dysfunctions.

## 5. LITERATURE

- 1. Chair material.
- 2. Bone K., Mills S. 2013. Principles and Practice of Phytotherapy. Modern Herbal Medicine, 2nd ed., Edinburgh, London, New York, Oxford, Philadelphia, St Louis, Sydney, Toronto: Elsevier, 1051 p.
- 3. Ա. Թորոսյան, Հայաստանի դեղաբույսերը, Երևան, 1983։
- 4. Լ. Հարությունյան, Բուսաբուժություն, Երևան, 1999։
- 5. D. Csupor, Phytotherapy, Szeged, 2015:
- 6. J. Barnes, L. Andersson, J. Phillipson, Herbal Medicines, London, 2007:
- 7. M. Henrich, J. Barnes, S. Gibbons, E. Williamson, Fundamentals of Pharmacognosy and
- 8. phytotherapy, London. 2012.
- 9. Вайс Р.Ф., Финтельман Ф. Фитотерапия. Руководство. Перевод с немецкого. Москва, "Медицина", 2004.
- 10. Лесиовская Е.Е., Л.В Пастушенков Фармакотерапия с основами фитотерапии. Москва, Издательский дом "ГЭОТАР-МЕД", 2003.
- 11. Руководство по фармакотерапии для врачей и фармацевтов. Под редакцией Габриеляна Э.С. и Борояна Р.Г., Ереван, изд-во "Гтутюн" НАН РА, 2001.
- 12. Bisset N.G. Herbal drugs and phytopharmaceuticals. Boca Raton, FL, CRC Prress, 1994.
- 13. Blumenthal M., Busse W.R., Goldberg A. The Complete Commission E Monographs: Therapeutic Guide to Herbal Medicines. Boston, MA: Integrative Medicine Communications, 1998.

6. ASSESSMENT COMPONENTS		POINT			
Attendances	16				
Assessment of knowledge acquisi	tion, abilities and skills		70		
Independent individual work			14		
7. ASSESSMENT SYSTEM /RATI	NG / SYSTEM				
Mark	Assessment Point	Assessmen	t letter		
"Excellent"	96-100	A+			
	90-95 A				
"Good"	80-89				
"Satisfactory"	60-69	C+			
	51-59	C			
"Unsatisfactory"					
"Tested"					
"Untested"	< 51	U			

NAME OF THE COURSE	POLYCLINIC THER.	APY			
TYPE OF COURSE	Mandatory	Mandatory			
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM				
THE FORM OF TRAINING	Full time				
PROFESSION	Doctor				
FACULTY	General Medicine				
COURSE	VI	SEMESTER	XII		
ACADEMIC YEAR	2020-2021				

CREATOR	PhD Ara Arshamyan
PHONE	+374 98 90 59 01
E-MAIL	aradoc1983@mail.ru

CHAIR	Therapeutic subjects
CLINICAL BASE	Polyclinic №14
HEAD OF CHAIR	PhD Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XII	3	17	3	90	51	20	31	26	13		+
Total		3	17	3	90	51	20	31	26	13		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge**

- 1. Ethics and deontology, features of patient psychology.
- 2. Anatomical features of the organism, organs and organ-systems.
- 3. Functional features of the organism, organs and organ-systems in different age groups.
- 4. General patterns of life activity of all classes of microorganisms and their role in human life and health.
- 5. Types of genetic diseases, etiology.
- 6. Basics of biochemical processes in a healthy organism and during various pathological processes.
- 7. Issues of disease development, functional characteristics of the organism during various pathological conditions.
- 8. Morphological changes in case of diseases.
- 9. Main medicines used, their therapeutic and side effects.
- 10. Types of internal diseases, etiology, pathogenesis, clinical course, complications, diagnosis, modern methods of treatment and prevention.
- 11. Basic principles of asepsis and antiseptics, hemotransphysiology, the most common surgical diseases.
- 12. Types of nervous system diseases, etiology, pathogenesis, clinical course, complications,

diagnosis, modern methods of treatment and prevention.

- 13. Types of infectious and parasitic diseases, etiology, pathogenesis, clinical course, complications, diagnosis, modern methods of treatment, anti-epidemiological actions.
- 14. Features of the body's immune responses and principles of correction.
- 15. Provision of emergency aid in life-threatening situations.
- 16. Features of radiological diagnosis.

#### **Abilities**

1. evaluate laboratory and instrumental diagnostic indicators

## **Possessions**

- 1. Collection of the patient's anamnesis.
- 2. Physical studies of a living person.

## 2. BRIEF CONTENT OF THE COURSE

"Polyclinic therapy" course examines the list of outpatient polyclinic institutions, their structure, service areas and their features, the main forms of polyclinic service.

## 3. GOAL OF THE COURSE

The goal of the course is to prepare medical graduates who can carry out preventive, diagnostic, therapeutic, educational, educational, organizational, research activities.

## 4. EDUCATIONAL RESULTS. At the end of the course, the student must

## **Know**

- **K1**. Basics of polyclinic therapy, areas and volume of medical services in the polyclinic.
- **K2.** The principles of the general practitioner's activity in the medical-prophylactic service of the population.
- **K3.** Diagnostics, therapeutic, preventive and rehabilitation activities, indications for inpatient treatment and guiding organizational measures used in polyclinic conditions.

### Be able to

- A1. Communicate with medical visitors of different age groups in an ambulatory setting.
- **A2.** Make a plan for examination, treatment and rehabilitation of outpatients.

## 5. LITERATURE

- 1. Chair material
- 2. Social hygiene and organization of healthcare, A.F. Serenko, V.V. Ershakova, M. 1977.
- 3. General practice and family medicine. Minsk "Belorus" 1997
- 4. B. Walter and others, Davidson's Principles and Practice of Medicine, 22nd Edition, Amsterdam, 2014.
- 5. D. Kasper, A. Fauci and others, Harrison's Principles of Internal Medicine, 19th Edition, New York, 2015

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+

	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	TOPOGRAPHIC AN	TOPOGRAPHIC ANATOMY AND OPERATIVE SURGERY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM				
THE FORM OF TRAINING	Full-time					
PROFESSION	Doctor					
FACULTY	General Medicine	General Medicine				
COURSE	II, III SEMESTER IV, V					
ACADEMIC YEAR	2020-2021					

CREATOR	DMed Sc Arsen Minasyan			
	PhD Eduard Avagyan			
PHONE	+374 99 77 37 74, +374 91 57 72 22			
E-MAIL	arsenminasyan76@gmail.com, avakedo83@yahoo.com			

CHAIR	Medical – Biological subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD Naira Hunanyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
II	IV	4	15	5	120	75	32	43	27	18		+
III	V	4	17	3	120	51	20	31	51	12	6	
Total		8	32	8	240	126	52	74	78	30	6	·

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## Knowledge:

- 1. about human organs, organ-systems and organism levels.
- 2. about the structural disorders of the organs and tissues of the sick organism.
- 3. about the structure, development and functioning of the tissues of the human body, as well as the structure, development and functionality of the tissues of the individual organism.
- 4. structural, developmental, sexual and personal characteristics of healthy and sick organisms; functional systems of human organism, their regulation and self-regulation in norm and pathology, impact effects of external environment.

### **Abilities:**

- 1. To make a person's physical examination, such as palpation, percussion, auscultation.
- 2. Autopsy, identification of dead tissues and organs.
- 3. Preparations of histological samples, and their subsequent examination with light microscope.
- 4. To interpret the results of the most common methods of functional diagnostics of blood, cardiovascular, lung, liver and other organs and systems; to determine and evaluate the results of

electrocardiogram, spirometry, thermometry, etc.

## 2. BRIEF CONTENT OF THE COURSE

"Topographic anatomy and Operative surgery" is a synthetic educational discipline containing systematized scientific knowledge and techniques in the field of topographic anatomy and operative surgery, studying the relationship between organs and tissues in the topographical regions, the layer anatomy of human body regions, projections of neuro-vascular structures, principles and techniques of surgical procedures.

## 3. GOAL OF THE COURSE

The goal of teaching and learning the academic discipline "Operative surgery and topographic anatomy" is to provide the students with the scientific knowledge about the human topographic anatomy and the general principles of the basic operations and applying this knowledge to substantiation and performing medical procedures and surgical interventions.

## 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- **K1.** Boundaries of human body regions, orientation lines, division of the human body into topographic regions and sub-regions, topographic formations: triangles, grooves, canals.
- **K2.** For the topographic regions of the human body: layered structure of the topographic region stratography, adjustment of the relationship of organs to each other sintopia, projectional anatomy holotopia, correction of the position of the organ to the bones sceletotopia.
- **K3.** Groups, types and uses of surgical instruments, general principles of tissues disconnection and connection.
- **K4.** Principles, accesses and techniques of the typical surgical interventions; basic surgical nodes and surgical sutures.

### Be able to:

- **A1.** Project on the skin the main organs, large vessels and nerves.
- **A2.** Correctly hold and correctly use surgical instruments; to apply the main surgical nodes and sutures.

#### Possess:

- **P1.** Among palpation to determine the names of the main structures, that form the relief of the topographic regions, palpate the pulsating points of the arteries in the topographic region and the places where the large vessels can be compressed to the bones during bleeding (on biological material or imitations (models)).
- **P2.** Exposure and ligation of vessels inside and outside of wound (on biological material or imitations (models)).
- **P3**. According the general principles of tissues disconnection and connection of tissues, to cut and suture the human tissues (on biological material or imitations (models)).

## 5. LITERATURE

- 1. Chair material
- 2. Островерхов Г.Е. Оперативная хирургия и топографическая анатомия [Текст]: учеб. для мед. вузов / Г.Е. Островерхов, Ю.М. Бомаш, Д.Н. Лубоцкий. 5-е изд., испр. М.: МИА, 2013.
- 3. Топографическая анатомия и оперативная хирургия: учебник / А.В. Николаев. 3-е изд., испр. и доп. М.: ГЭОТАР-Медиа, 2015. 736 с.
- 4. Кованов В.В. Оперативная хирургия и топографическая анатомия. М.: Медицина, 2001.
- 5. Островерхов Г.Е. Оперативная хирургия и топографическая анатомия [Текст]: учеб. для мед. вузов / Г.Е. Островерхов, Ю.М. Бомаш, Д.Н. Лубоцкий. 5-е изд., испр. М.: МИА, 2013.
- 6. Топографическая анатомия и оперативная хирургия: учебник / А.В. Николаев. 3-е изд.,

- испр. и доп. М.: ГЭОТАР-Медиа, 2015. 736 с.
- 7. Кованов В.В. Оперативная хирургия и топографическая анатомия. М.: Медицина, 2001.
- 8. A. Nicalaev, Topographic Anatomy and Operative Surgery. Textbook, 672p., 2018
- 9. H. Ellis, Clinical Anatomy: Applied Anatomy for Students and Junior Doctors, Hoboken, 2013
- 10. F. Netter, Atlas of Human Anatomy, 6th Edition, Amsterdam, 2014
- 11. Keith L. Moore Clinically Oriented Anatomy 7th Edition, 2017

6. ASSESSMENT COMPONENTS	POINT
Attendance	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	В+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	GENERAL SURGER	GENERAL SURGERY				
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL				
	PROGRAM					
THE FORM OF TRAINING	Full time	Full time				
PROFESSION	Doctor	Doctor				
FACULTY	General Medicine	General Medicine				
COURSE	III	SEMESTER	V, VI			
ACADEMIC YEAR	2020-2021					

CREATOR	M.D. prof. A. Minasyan			
	PhD, Eduard Avagyan			
PHONE	+374 99 77 37 74, +374 91 57 72 22			
E-MAIL	minas77@mail.ru, avakedo83@yahoo.com			

CHAIR	Surgical Subjects
CLINICAL BASE	Scientific center of traumatology and orthopedy, "Nairi" MC
HEAD OF CHAIR	M.D. prof A. Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
I	I	3	17	3	90	51	18	33	26	13		+
	II	4	15	4	120	60	22	38	42	12	6	
Total		7	32	7	210	111	40	71	68	25	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## Knowledge:

- 1. about human organs, organ-systems and anatomical features of the organism.
- 2. about disorders of the normal structure of human organs and tissues in a diseased state.
- 3. the anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and sick organism.
- 4. relationships of organs and tissues in separate topographical regions, which gives an opportunity to understand the ways of the emergence, development and spread of pathological processes.
- 5. about the general principles of operations, operative approaches and methods.

## Abilities:

- 1. disclosure of cadaveric tissues and patient's organs.
- 2. determine and evaluate the results of electrocardiography, spirometry and thermometry, hematological indicators.
- 3. to perform surgical suturing and ligation, to use surgical instruments correctly, to perform tissue separation and connection, in the meantime to stop bleeding.

4. to carry out the identification of unnecessary anatomical orientations for physical examinations of a living person (palpation, percussion, auscultation).

## 2. BRIEF CONTENT OF THE COURSE

The subject of General surgery studies the basics of diagnostics, treatment and anesthesia in surgery, classification and names of operations. Learn about the main types of surgical diseases. Learn about main methods of anesthesia.

## 3. GOAL OF THE COURSE

The subject of General surgery studies the basics of diagnostics, treatment and anesthesia in surgery, classification and names of operations. Learn about the main types of surgical diseases. Learn about main methods of anesthesia.

## 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

## Know:

- K1. Surgical service. Surgical clinic, Introduction to the clinic
- K2. Methods of antisepsis and rules.
- K3. Methods of local and general anesthesia
- K4. Classification of wounds, methods of treatment and dressing.
- K5. The features of prolonged compression syndromes
- K6. Types of bleeding and methods for arrest the bleeding.
- K7. The diagnostic methods and treatment bone fractures and join dislocation.
- K8. Necrosis, gangrene, fistula, trophic ulcer. Surgical features of ulcer.
- K9. Methods of diagnostic tumors
- K10. Operation, pre and post operation periods. Types of operation.
- K11. Purulent infections, methods of treatment and deranging.
- K12. Parasitic disease, Introduction to surgical treatment methods.

### Be able to:

- A1. Ability to use the methods of asepsis and antisepsis.
- A2. Arrest the bleeding. Temporally and constant methods.
- A3. Practical test of blood grouping with standard serums and standard erythrocytes.
- A4. Perform blood canning and preservation.
- A5. Ensure of immobilization of limb.
- A6. Use some methods of local anesthesia.
- A7. Make bandaging.

#### Possess:

- P1. Use sterile bandaging in dressing burn, frostbites, open fractures and soft tissues wound.
- P2. Collecting of anamnesis morbid
- P3. Processing of the surgical area for the operation.

#### 5. LITERATURE

- 1. Chair material
- 2. Рычагов, Г.П., Нехаев, А.Н. Общая хирургия. Хирургические болезни. Учебник в 2-х томах / Г.П.Рычагов, А.Н.Нехаев. Мн.: Выш. шк., 2012. 1 Т. 427 с. 2 Т. 479 с.
- 3. Петров, С.В. Общая хирургия: учебник / С.В.Петров. 4-е изд., перераб. и доп. М.: ГЭОТАР-Медиа, 2014. 832 с.: ил
- 4. Անանիկյան Պ.Պ., Անանիկյան Պ.Պ., Նանյան Ս.Մ., ՝Ընդհանուր վիրաբուժություն՝, Երևան, 1994թ.
- 5. Гусенев А.З., Семерджян В.В., "Общая хирургия", Тула, 2002 г.

- 6. Гостищев Н.В., "Общая хирургия", Москва, 2001 г.
- 7. Ростимев В.К., "Общая хирургия", Москва, 1998 г.
- 8. Астапенко В.Г., "Справочник хирурга", Москва, 1996 г.
- 9. Муратов А. Н., "Общая хирургия", Москва, 1989 г.
- 10. Sabiston textbook of surgery, Courtney M. Townsend, 20-th edition, 2017.
- 11. Farquharson's textbook of operative general surgery, Edited by Margaret Farquharson, tenth edition, 2015
- 12. Essentials of general surgery, Peter F. Lawrence, fifth edition, London 2007.
- 13. General surgery, Butyrsky, 2-d edition, Simferopol, 2004.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	SURGICAL DISEASES, PEDIATRIC SURGERY					
TYPE OF COURSE	Mandatory	Mandatory				
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM					
THE FORM OF TRAINING	Full time					
PROFESSION	Doctor					
FACULTY	General Medicine					
COURSE	IV-VI	SEMESTER	VII - XII			
ACADEMIC YEAR	2020-2021	•				

CREATOR	Doctor of Medical Science Arsen Minasyan			
	PhD. E. Avagyan A. Shaljyan			
PHONE	+374 99 77 37 74, +374 91 57 72 22, +374 91 49 83 25			
E-MAIL	minas77@mail.ru, avakedo83@yahoo.com, arsentor89@mail.ru			

CHAIR	Surgical subjects				
CLINICAL BASE	"Nairi" MC, "Shengavit" MC, "Surb Grigor Lusavorich" MC, R				
	Medical Center of Abovyan named after Harutyunyan				
HEAD OF CHAIR	Doctor of Medical Science. A. Minasyan				

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
IV	VII	4	17	4	120	68	30	38	34	18		+
l v	VIII	4	13	4	120	52	20	32	50	12	6	
V	IX	3	17	3	90	51	16	35	21	18		+
·	X	3	13	3	90	39	14	25	33	12	6	
VI	XI	2	17	2	60	34	14	20	14	12		+
V1	XII	3	17	4	90	68	20	48	16	6	S.E.	
Total		19	94	20	570	312	114	198	168	78	12	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge**

- 1. On the anatomical features of human organs, organ systems and organism
- 2. Disorders of the normal structure of human organs and tissues in a diseased state
- 3. Organizational-physiological, sex-age-individual features of the development of a healthy and diseased organism
- 4. Relationships between organs and tissues in separate topographic regions, which gives an idea of the pathogenesis, development and distribution of pathological processes.
- 5. General principles of surgeries, operative inputs and methods

6. Basic principles of diagnosis, treatment and anesthesia in surgery

## **Abilities**

- 2. Identification of dead tissues and patient's organs:
- 3. Determine and evaluate the results of electrocardiography, respiration and thermometry, hematological indicators
- 4. make a surgical connection, use the surgical instruments correctly, cut the tissue, connect it, and stop the bleeding.
- 5. Perform physical examinations of a living person, such as palpation, percussion, auscultation.
- 6. Apply the rules of asepsis and antiseptic
- 7. Stop bleeding by temporary and final methods
- 8. Determine blood grouping by standard serums and standard erythrocytes
- 9. Perform blood conservation: maintenance
- 10. provide limb immobilization
- 11. Use some methods of local anesthesia
- 12. Apply bandages

## **Possessions**

- 1. Aseptic dressing for soft tissue wounds, burns, frostbite, open fractures:
- 2. Collection of patient history
- 3. To intervene in the development of the surgical field

## 2. BRIEF CONTENT OF THE COURSE

"Surgical diseases, pediatric surgery" subject studies surgical diseases, principles and methods of diagnosis and treatment, and the most important surgical features of childhood.

During semesters 7, 8, 9, 10, 11 and 12, students study the basic principles of thoracic, abdominal, vascular, cardiac and pediatric surgery.

## 3. GOAL OF THE COURSE

## 1.1. The goal of the course

The goal of the course is to teach surgical diseases of the breast, abdomen, as well as the heart and blood vessels, the principles and methods of their differential diagnosis and treatment.

## 1.2. The problems of the course

- identify the main surgical syndromes and diagnose the main surgical diseases in thoracic, abdominal, vascular and cardiac surgeries.
- to familiarize with the methods of treatment of the main surgical diseases of the chest, abdomen, as well as the heart and blood vessels.
- to know the surgical features characteristic of childhood diseases.

## 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

## **Know**

- K1. Etiology, pathogenesis, types, classifications of surgical diseases
- K2. Clinic of Surgical Diseases
- K3. Peculiarities of diagnosis of surgical diseases
- K4. The most complete ways to treat surgical diseases
- K5. Possible complications of surgical diseases, their prevention and treatment
- K6. Peculiarities of surgical diseases in childhood

## Be able to

- A1. Develop a surgical lab and instrumental examination plan
- A2. Collect anamnesis data, conduct general clinical examination of surgical patients

### **Possess**

- P1. Clinical diagnosis of the patient's basis and substantiate it based on the differential diagnosis
- P2. Establish guidelines for conservative-surgical treatment of surgical patients:
- P3. Perform the most common medical manipulations

## 5. LITERATURE

- 1. Chair Material
- 2. Хирургические болезни [Текст]: учебник /ред. М.И. Кузин. 4-е изд., перераб. и доп. Москва: ГЭОТАР-Медиа, 2015. 992 с.
- 3. Хирургические болезни [Электронный ресурс]: учебник. В 2 т. /ред. В.С. Савельев, А.И. Кириенко. 2-е изд., перераб. и доп. Москва: ГЭОТАР-Медиа, 2014. 720 с.
- 4. Кузин М. И., Шкроб О. С., "Хирургические болезни", Москва, 2002 г.
- 5. Астапенко В. Г., "Справочник хирурга", Минск, 1980 г.
- 6. Պարոնյան Ռ.Լ., Վիրաբուժական հիվանդություններ՝, Երևան, 1970թ.
- 7. Астапенко В.Г., "Справочник хирурга", Москва, 1996 г.9. Муратов А. Н., "Общая хирургия", Москва, 1989 г.
- 8. Sabiston textbook of surgery, Courtney M. Townsend, 20-th edition, 2017.
- 9. Farquharson's textbook of operative general surgery, Edited by Margaret Farquharson, tenth edition, 2015
- 10. Atlas of general surgical techniques / [edited by] Courtney M. Townsend Jr., i. B. Mark Evers. -- 1s ed.
- 11. Essential surgery [edited by] Clive R. G. Quick, -- 5 ed.
- 12. Oxford Handbook of Clinical Surgery, 3rd Edition; [edited by] McLatchie, Greg; Borley, Neil; Chikwe, Joannaof Clinical Surgery, 3rd Edition; [edited by] McLatchie, Greg; Borley, Neil; Chikwe, Joanna

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В

"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

COURSE NAME	UROLOGY							
COURSE TYPE	Mandatory							
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL							
	PROGRAM							
STUDY FORMAT	Full-time							
SPECIALIZATION	Doctor							
FACULTY	General Medicine							
YEAR	V SEMESTER IX							
ACADEMIC YEAR	2020-2021							

CREATOR	Doctor of Medical Science Arsen Minasyan					
	PhD V. Ashughyan					
	H. Tatosyan					
PHONE	+374 99 77 37 74, +374 91 47 04 42, +374 77 88 88 44					
E-MAIL	minas77@mail.ru, -, hakkobta@gmail.com					

CHAIR	Surgical subjects
CLINICAL BASE	"Saint Grigory the Illuminator"MC
HEAD OF THE CHAIR	Doctor of Medical Science A. Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	X	2	17	2	60	34	12	22	17	9		+
Total		2	17	2	60	34	12	22	17	9		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge:**

- 1. Of human organs, organ-systems and organism levels.
- 2. About disorders of the normal structure of human organs and tissues in a diseased state.
- 3. The anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and sick organism.
- 4. Relationships of organs and tissues in separate topographical regions, which gives an opportunity to understand the ways of the emergence, development and spread of pathological processes.
- 5. General principles of operations, which include the study of operative entrances and methods.
- 6. The basic principle of diagnosis, treatment and anesthesia in surgery.

## **Abilities:**

- 1. Perform physical examinations such as palpation, percussion, auscultation.
- 2. Determine and evaluate the results of electrocardiography, spirometry and thermometry,

hematological indicators.

- 3. Apply surgical sutures and bandages, use surgical instruments correctly, cut and join tissues, stop bleeding in the process.
- 4. Apply the rules of aseptic and antiseptic.
- 5. Stop bleeding, with temporary and definitive methods.
- 6. Determine blood group affiliation with standard sera and standard erythrocytes.
- 7. Use some methods of local anesthesia.
- 8. Apply different types of bandages.
- 9. Organize purely surgical examinations and treatments of patients.

#### Possessions:

1. The methods of clinical examination of the patient

### 2. BRIEF CONTENTS OF THE COURSE

"Urology" deals with the study and treatment of diseases of the urinary tract of both male and female representatives, as well as problems of the male reproductive system. It studies the clinical symptoms of urological diseases, examination methods, radiological studies, their types and characteristics, developmental defects of the kidneys, urinary tract and genital system, non-specific inflammatory diseases of the genitourinary organs, lesions of the kidneys and urinary tract, neoplastic diseases of the kidneys, urinary tract and genital organs, prostate diseases: acute and chronic prostatitis, prostate adenoma, urolithiasis, hydronephrosis, hydrourethronephrosis.

## 3. GOAL OF THE COURSE

The goal of the "Urology" course is to teach methods of treating diseases of the kidneys, urinary tract and male genital organs.

## 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

### Know:

K1. Etiology, pathogenesis, clinic, diagnostic features and the most complete method of treatment of urological diseases

## Be able to:

- A1. Collect and prepare urine for clinical examination.
- A2. Perform the experiments of Addis-kakovsky, Nicheporenko, Amburghe, Zemnitsky and interpret the results.
- A3. Perform bladder catheterization (for women).
- A4. Differentiate between the different types of hematuria and distinguish it from urethrorrhagia and hemoglobinuria.
- A5. Describe the normal cystoscopic picture.
- A6. Interpret the pictures made by different methods of x-ray examination of urological diseases.

## Possess:

- P1. Differential diagnosis of urological diseases.
- P2. Conservative and operative methods of treating urological diseases.

## 5. LITERATURE

- 1. Chair material
- 2. Glenn's Urologic Surgery Seventh Edition; Philadelphia, USA; 938p.; 2010.
- 3. Campbell-Walsh Urology; Edited by Alan J. Wein; Oxford University Press; 2015.
- 4. Глыбочко П.В., "Урология", Москва, 2014г.
- 5. Ю.Г. Аляев "Урология Российские клинические рекомендации", Москва, 2015г.
- 6. Алиев Ю.Г., Амосов А.В., Газимиев М.А. "Ультразвуковые методы функциональной

диагностики в урологической практике" М., Р.Валент, 2001						
7. Мартин И. Резник, Эндрю К. Новик, "Секреты урологии", Москва, 2003г.						
6. ASSESSMENT COMPONENTS	POINT					
Attendances	16					
Assessment of knowledge acquisition, abilities and skills	70					
Independent individual work	14					

7. ASSESSMENT RATING SCH	EME	,		
Mark	Assessment Point	Assessment letter		
"Excellent"	96-100	A+		
	90-95	A		
"Good"	80-89	B+		
	70-79	В		
"Satisfactory"	60-69	C+		
	51-59	С		
"Unsatisfactory"	50 and below	D		
"Tested"	≥51	S		
"Untested"	< 51	U		

NAME OF THE COURSE	ANESTHESIA AND	ANESTHESIA AND RESUSCITATION							
TYPE OF COURSE	Mandatory	Mandatory							
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM							
THE FORM OF TRAINING	Full time	Full time							
PROFESSION	Doctor	Doctor							
FACULTY	General Medicine	General Medicine							
COURSE	VI SEMESTER XII								
ACADEMIC YEAR	2020-2021								

CREATOR	Doctor of Medical Science., Prof. Rita Virabyan, Ernest Sargsyan
PHONE	+374 93 37 22 85, 0974 98 08 07 96
E-MAIL	drser92@gmail.com

CHAIR	Surgical Subjects
CLINICAL BASE	"St. Grigor Lusavorich" MC
HEAD OF CHAIR	M.D. PhD A. Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XII	4	17	4	120	68	24	44	34	18		+
Total		4	17	4	120	68	24	44	34	18		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge**

- 1. anatomical features of the organism, organs and organ-systems in children.
- 2. about disorders of the normal structure of human organs and tissues in a diseased state.
- 3. the anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and sick organism.
- 4. Relationships of organs and tissues in separate topographical regions, which gives an opportunity to understand the ways of the emergence, development and spread of pathological processes.
- 5. General principles of surgery, including the study of operative approaches and methods.
- 6. The basic principle of diagnosis, treatment and anesthesia in surgery.
- 7. etiology, pathogenesis, clinic, diagnostic features and the most complete method of treatment of surgical diseases of the chest and abdomen.
- 8. physiological features of pathological, pathological states of the organism, functional changes of organ systems during the main diseases of internal organs.
- 9. etiology, pathogenesis, clinic, diagnostic features and the most complete method of treatment of internal diseases.
- 10. etiology, pathogenesis, clinic, diagnostic features and the most complete method of treatment of injuries and orthopedic diseases.

11. the effect of medicine on the human body. Medicine pharmacodynamics, pharmacokinetics, side effects and drug interaction in conditions of combined use, as well as individual examples of drug-disease organism interaction due to the characteristics of the diseased organism and the presence of concomitant diseases.

# **Abilities**

- 1. to determine and evaluate the results of electrocardiography, spirometry and thermometry, hematological indicators.
- 2. carry out physical examinations of a living person (palpation, percussion, auscultation).
- 3. perform surgical suturing and ligation, use surgical instruments correctly, perform tissue separation and union, and stop bleeding in the process.

## **Possessions**

1. Collecting the patient's anamnesis.

#### 2. BRIEF CONTENT OF THE COURSE

The "Anesthesia and Resuscitation" course examines the methods and mechanisms of anesthesia, possible complications, as well as the restoration of the functioning of vital organs and organ systems. The following issues are discussed: Pre-operative, intra-operative, post-operative period, assessment of the patient's pre-operative condition; local anesthesia: types, methods of application, indications. General anesthesia: types, methods of application, indications. the basics of body function disorders during general anesthesia. Cardiovascular system function disorders, Cardiopulmonary resuscitation. Methods of monitoring the activity of vital organs and organ-systems during resuscitation. Swelling of the lungs; asphyxia. Indications of artificial respiration, methods of application. Tracheostomy, tracheostomy: indications, principles of care. Homeostasis disorders: principles of detoxification therapy; Anti-shock therapy.

## 3. GOAL OF THE COURSE

The goal of the "Anesthesia and Resuscitation" subject is to teach the students of the medical faculty the methods and mechanisms of anesthesia, possible complications, as well as the restoration of the functioning of vital organs and organ-systems.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

## Know

- **K1.** Indications, contraindications, methods of performing anesthesia, possible complications.
- **K2.** Pathological conditions that are an indication for resuscitation, and possible treatment methods in cases of their presence.

#### Be able to

- **A1**. Diagnose and characterize clinical death in all its manifestations, as well as interpret the rehabilitation interventions applicable in this condition.
- **A2**. Diagnose and characterize functional disorders of vital organs and organ systems, as well as interpret rehabilitative interventions applicable in that condition.

### **Possess**

- P1. To perform tracheal intubation
- **P2.** Performance of tracheostomy, tracheostomy
- P3. Performance of intravenous and intra-arterial catheterization
- P4. Preparation of an appropriate system for intensive care and blood transfusion
- P5. Application of artificial respiration methods
- P6. Indirect heart massage technique, gastric lavage technique.

#### 5. LITERATURE

- 1. Chair material.
- 2. Գ.Գ. Մխոյան, «Անեսթեզիոլոգիայի և ինտենսիվ թերապիայի արձանագրերն ու

- հիմունքները», Երևան, 1999թ.
- 3. Карл Л. Гвиннут (ред). "Клиническая анестезия" ГЭОТАР-МЕД, 2002г.
- 4. Малышев В. Д., "Интенсивная терапия. Реанимация. Первая помощь", Москва, 2000г.
- 5. Интенсивная терапия. Национальное руководство. В 2-х томах., Гельфанд Б.Р., Салтанов А.И., Москва, ГЭОТАР-Медиа, 2009.
- 6. Handbook of Critical and intensive care medicine, J. Varon, P. Acosta, Springer, 2010
- 7. Morgan and Mikhail's Clinical Anesthesiology, J. Wasnick, J. Butterworth, D. Mackey, Lange, 2013
- 8. Textbook of Critical Care, Vincent J.-L. et al. (6th ed.), 2014.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

, industrial of the state of th									
Mark	Assessment Point	Assessment letter							
"Excellent"	96-100	A+							
	90-95	A							
"Good"	80-89	B+							
	70-79	В							
"Satisfactory"	60-69	C+							
	51-59	С							
"Unsatisfactory"	50 and below	D							
"Tested"	≥51	S							
"Untested"	< 51	U							

NAME OF THE COURSE	TRAUMATOLOGY AND ORTHOPAEDICS						
TYPE OF COURSE	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	IV SEMESTER VII, VIII						
ACADEMIC YEAR	2020-2021						

CREATOR	MD Ara Ayvazyan, Tadevos Hakhumyan
PHONE	+374 77 60 87 57, +374 77 53 22 47
E-MAIL	ara aivazyan@mail.ru, tatos-haxumyan@mail.ru

CHAIR	Surgical Subjects
CLINICAL BASE	Scientific Center of Traumatology and Orthopaedy
HEAD OF CHAIR	MD prof A. Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
IV	VII	4	17	4	120	68	24	44	34	18		+
	VIII	3	13	4	90	52	20	32	20	12	6	
Total		7	32	8	210	120	44	76	54	30	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## Knowledge:

- 1. At the levels of human organs, organ systems, and the organism.
- 2. About disturbances of the normal structure of human organs and tissues in pathological conditions.
- 3. Structural features of cells, tissues, and organs; methods of their study.
- 4. Anatomical and physiological specific properties of the structure and development of a healthy and diseased organism, dependent on sex, age, as well as individual characteristics.
- 5. Anatomical and physiological specific properties of the structure and development of a healthy and diseased organism, dependent on sex, age, as well as individual characteristics.
- Relationships and interplay of organs and tissues in specific topographic regions that allow getting an idea about the pathogenesis, development, and distribution of pathological processes.
- 7. General principles of surgical interventions, including the study of surgical approaches and methods.
- 8. General principles of diagnosis, treatment, and anesthesia in surgery.

- 9. Pathological, physiological features of pathological conditions of the organism, functional changes of organ systems during the main diseases of internal organs.
- 10. Aetiology, pathogenesis, clinical presentation, diagnostic features of surgical diseases, as well as comprehensive methods for diagnosis and treatment thereof.
- 11. Aetiology, pathogenesis, clinical presentation, diagnostic features of internal diseases, as well as comprehensive methods for diagnosis and treatment thereof.
- 12. Knowledge of radiological diagnostic methods, and, based on this, selection of the appropriate methods for detection of tumors of different origins and localization, correct interpretation of examination results.

#### Abilities:

- 1. to perform physical examinations on a patient, such as palpation, percussion, and auscultation.
- 2. examination of cadaveric tissues and organs of a patient.
- 3. assess the histophysiological condition of cells, tissues, and organs of the human body.
- 4. determine and evaluate the results of electrocardiography, spirometry, and thermometry, as well as hematological indicators.
- 5. perform surgical sutures and knots, correctly utilize surgical tools and instruments, and carry out tissue dissection and ligation, with simultaneous hemostasis.
- 6. implement and apply the rules of asepsis and antisepsis.
- 7. perform methods for temporary and definitive hemostasis.
- 8. determine blood group by standard serums and standard erythrocytes.
- 9. performs blood conservation and preservation.
- 10. perform immobilization of limbs
- 11. use certain methods of local anesthesia
- 12. apply different types of bandages.

# Skills:

- 1. Taking a medical history and medical records.
- 2. Surgical preparation of the surgical field for surgical intervention.

# 2. BRIEF CONTENT OF THE COURSE

The "Traumatology and Orthopaedics" educational course consists of two sections. The "Traumatology" section studies the prevention, diagnosis, and treatment of bone fractures, dislocations, soft tissue injuries, wounds and wound infection, gunshot injuries, and polytraumas.

The "Orthopedics" section studies the prevention, diagnosis, and treatment of musculoskeletal deformities and functional disorders that may result from birth defects, developmental defects, certain injuries, or diseases.

# 3. GOAL OF THE COURSE

## 3.3. The goal of the course

The goal of the "Traumatology and Orthopaedics" course is to train future general medical practitioners who can provide the necessary amount of help to an injured patient in emergencies, solve evacuation problems competently, as well as detect orthopedic pathology, and direct the patients to receive appropriate treatment.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

# Know

- K1. types of injuries and orthopedic diseases, their aetiology, and pathogenesis
- K2. examination methods used in traumatology and orthopedics.

- K3. modern methods of treatment of injuries and orthopedic diseases
- K4. periods of rehabilitation in case of typical injuries and orthopedic diseases.
- K5. rehabilitation measures in case of traumas and orthopedic pathology.

# Be Able to

- A1. develop a clinical and laboratory-instrumental examination plan in case of traumas and orthopedic diseases.
- A2. collect data for medical history and medical records, and conduct a general clinical examination of patients.

#### **Possess**

P1. the types and methods of providing first medical aid, especially in an event of shock and terminal conditions.

# 5. LITERATURE

- 1. Chair material
- 2. Այվազյան Ա. Վ. «Վնասվածքաբանություն և օրթոպեդիա», ձեռնարկ, Երևան, 2011
- 3. Демичев С. В. «Первая помощь при травмах и заболеваниях». /Учебное пособие/. М. «Гэотармедиа», 2011
- 4. «Травматология и ортопедия» учебник. /под редакцией Н. В. Корнилова-М., Медиа, 2011
- 5. Oxford Textbook of Trauma and Orthopaedics, Edited by Christopher Bulstrode, Oxford University Press, Print ISBN-13: 9780199550647, 2011
- 6. Essential Orthopaedics and Trauma; Fifth Edition; David J. Dandy, Dennis J. Edwards; Toronto 2009, 490 p.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	ONCOLOGY	ONCOLOGY						
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM	PROGRAM						
THE FORM OF TRAINING	Full time	Full time						
PROFESSION	Doctor	Doctor						
FACULTY	General Medicine	General Medicine						
COURSE	VI SEMESTER XI							
ACADEMIC YEAR	2020-2021							

CREATOR	MD Valeri Barseghyan, PhD Aram Badalyan
PHONE	+374 91 79 46 94, +374 93 43 06 63
E-MAIL	arams@doctor.com

CHAIR	Surgical Subjects
CLINICAL BASE	"Nairi" MC
HEAD OF CHAIR	MD prof. A. Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XI	4	17	4	120	68	24	44	34	12	6	
Total		4	17	4	120	68	24	44	34	12	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# **Knowledge**

- 1. The structure of human organs, organ-systems.
- 2. About disorders of the normal structure of human organs and tissues in a diseased state.
- 3. The anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and sick organism.
- 4. Physiological features of pathological and pathological states of the organism, functional changes of organ systems during the main diseases of internal organs.
- 5. Structural features of cells, tissues and organs, methods of their study.
- 6. Relationships of organs and tissues in separate topographical regions, which gives an opportunity to understand the ways of the emergence, development and spread of pathological processes.
- 7. General principles of surgery, including the study of operative approaches and methods.
- 8. Basic principles of diagnosis, treatment and anesthesia in surgery.
- 9. Knowing radiodiagnosis methods and choosing the appropriate method for detecting tumors of different origin and location based on it, correct interpretation of examination results.

# **Abilities**

1. Perform physical examinations of a living person such as palpation, percussion, auscultation.

Organize patient examination.

- 2. Determine and evaluate the results of electrocardiography, spirometry and thermometry, hematological indicators,
- 3. Apply the rules of aseptics and antiseptics
- 4. Stop bleeding, with temporary and final methods.
- 5. Determine blood group affiliation with standard sera and standard erythrocytes.
- 6. To give an assessment of the histophysiological state of cells, tissues and organs of the human body.
- 7. Ensure limb immobilization.
- 8. Perform surgical suturing and ligation, correct use of surgical instruments, tissue separation and connection.

#### **Possessions**

1. Skills for working with magnifying equipment.

# 2. BRIEF CONTENT OF THE COURSE

The subject "Oncology" studies medical ethics and deontology, organization of oncology service, dispensation of patients, principles of diagnosis of cancer diseases, modern research methods, theories of malignant neoplasms, risk factors and prevention, general principles of diagnosis and treatment, radical and palliative treatment, prophylactic research role in the process of early detection of cancer, indications and contraindications for surgical, radiation and drug treatment of patients with malignant tumors, features of treatment of malignant neoplasms depending on the stage of development of the disease, combined, combined and complex treatment methods, symptomatic treatment, breast and lung tumor diseases, pediatric oncology, epidemiology, features of diagnosis and treatment of malignant neoplasms in children.

# 3. GOAL OF THE COURSE

The goal of the subject "Oncology" is to provide knowledge, practical abilities and skills on the fundamental issues of general and private oncology.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

## **Know**

- K1. Problems and organizational structures of the oncology service.
- K2. Factors contributing to the occurrence of neoplasms and prevention measures.
- K3. Symptoms of the most common malignant neoplasms, the pathogenesis of their development.
- K4. Modern methods of diagnosis of malignant tumors, the role and types of instrumental and morphological studies.
- K5. Modern principles of radical and palliative treatment of malignant tumors and their results.
- K6. Oncological deontological aspects.

#### Be able to

- A1. Collect the anamnesis, analyze the nature of the patient's complaints.
- A2. Conduct a physical examination of a patient who has cancer.
- A3. Formulate and prove the clinical diagnosis.
- A4. To determine the target groups of the population from the point of view of the occurrence of malignant tumors.

## **Possess**

- P1. Organization of dispensary control of patients who have cancer.
- P2. The appointment of unnecessary clinical studies of patients who have cancer.

# 5. LITERATURE

- 1. Chair material.
- 2. Վ.Ս. Բարսեղյան, «Ուռուցքաբանության հիմունքներ», Երևան, 2010թ.

- 3. Шаин А.А., "Онкология, учебник для медицинских вузов". Ереван, 2004г., 544 стр.
- 4. Клиническая онкология, Черенков В. Г. М.: Academia, 2010. 432 с
- 5. NCCN Clinical Practice Guidelines in Oncology, 3rd Edition, David J. Kerr (Editor), Oxford university press, 2010, 2110p.
- 6. Textbook of surgical oncology, R Daniel Beauchamp, Theo J M Ruers, eBook, 456 p.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	RADIOLOGICAL DIAGNOSIS						
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	III SEMESTER VI						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Gayane Ayvazyan, Aida Arzumanyan
PHONE	+374 99 27 72 73, +374 77 37 35 36
E-MAIL	kananeh@mail.ru, aida92-17@mail.ru

CHAIR	Therapeutic subjects
CLINICAL BASE	Abovyan Medical Center After Rubik Harutyunyan
HEAD OF CHAIR	PhD Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
III	VI	3	15	4	90	60	20	40	16	14		+
Total		3	15	4	90	60	20	40	16	14		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge

- 1. Ethics and deontology in medicine, taking into account the characteristics of the sick organism, the laws of dialectical materialism in medicine.
- 2. Individual features of the anatomiophysiological and age-sex structure and development of healthy and diseased organisms, the structure, topography and development of organs and systems, their functional grayness.
- 3. Knowledge of chemical elements with a certain biological role in human life.
- 4. The basic laws of physics, the physical phenomena and patterns underlying the main processes in the human body. Characteristics of physical factors affecting the human body and biophysical mechanisms of influence.
- 5. The main metabolic processes in the body to detect disorders of protein, carbohydrate and fat metabolism, the main biochemical indicators of blood for the assessment of the state of protein, carbohydrate and fat metabolism, knowledge of the participation of various organ systems in metabolism to detect pathologies of the liver, gastrointestinal system, kidneys, cardiovascular system.
- 6. Functional systems of the human body, their regulation and self-regulation under the influence of the external environment in normal and pathological conditions.
- 7. Pharmacokinetics of the main medicinal preparations used in the main diseases of internal

- organs, indications for their appointment. Side effects of medications.
- 8. Knowledge of infection and immunity, the role of infection in the etiology of major infectious and infectious-allergic diseases.
- 9. Basic knowledge about immunity, its types, forms of expression. The role of immunity during the infectious process. Characteristics of the main reactions of humoral immunity.
- 10. Morphological changes during diseases of internal organs.
- 11. The reactivity of microorganisms during the development of pathological processes, functional changes of organ systems during the main diseases of internal organs.
- 12. Clinical methods of examining therapeutic patients. Laboratory and instrumental examination of patients (thermometry, spirometry, gastric and duodenal probing, sputum: blood, urine, stool examination, gastric juice examination). Theoretical understanding of basic laboratory-instrumental research conducted by specialists.

## **Abilities**

- 1. know the topography of the main vascular and nerve trunks of the organs.
- 2. ability to use educational, scientific, popular scientific literature, Internet for professional activity.
- 3. Analysis of the results of the most common methods of functional diagnostics used to detect the pathology of blood, heart and arteries, kidneys, liver and other organs and systems.
- 4. Determine and evaluate the results of ECG, spirography, thermometry, hematological indicators.
- 5. To distinguish pathological changes in normal indicators of metabolite levels (glucose, urea, bilirubin, uric acid, lactic acid, pyromalic acid, etc.) in blood serum, read the proteinogram and explain the significance of the differences.

Explain the data of enzymological examination of blood serum.

# **Possessions**

1. medico-anatomical concepts.

# 2. BRIEF CONTENT OF THE COURSE

The course examines the principles of operation of radio diagnostic devices, computed tomography, nuclear resonance, and radioisotope diagnostics, which allow detecting minor changes in hard-topenetrate organs.

# 3. GOAL OF THE COURSE

The goal of teaching the subject "Radiological diagnosis" is to prepare students of the medical faculty for clinical work. The main provisions of the program include strengthening and renewal of theoretical knowledge, improvement of practical abilities and skills.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

# **Know**

- K1. principles of operation of radiographic equipment, types of contrast agents.
- K2. the principles of computed tomography, nuclear resonance, radioisotope, diagnostics, which allow detecting minor changes in hard-to-penetrate organs,
- K3. the latest advances in radiology and medical technology.

## Be able to

- A1. read X-ray pictures and write diagnostic conclusions,
- A2. read x-rays, echograms, angiograms, CT, MRI, sincigrams,
- A3. distinguish normal from pathology,
- A4. formulate a radiographic conclusion and justify the diagnosis,

#### <u>Possess:</u>

- P1. the basic principles of radiological diagnosis
- P2. methods of evaluating the results of modern X-ray examination,
- P3. deciphering the results of radiological diagnostic methods,
- P4. knowledge of the primary X-ray symptoms of the most common diseases.

# 5. LITERATURE

- 1. Chair material
- 2. G. Avetisyan, H. Edilyan, Radiological diagnosis, Yerevan, 2012,
- 3. J. Benseler, The Radiology Handbook, Athens, 2006,
- 4. M. Chen, T. Pope, D. Ott, Basic Radiolkogy, New York, 2011,
- 5. Yu. Lishmanova, V. Chernova, Radionuclide diagnostics for practitioners, Tomsk, 2004.

6. ASSESSMENT COMPONENTS							
Attendances							
Assessment of knowledge acquisition, abilities and skills							
Independent individual work							
7. ASSESSMENT SYSTEM /RATING / SYSTEM							
Mark Assessment Point Assessment letter							
"Fycellent" 96-100 A+							

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	CLINICAL PHA	CLINICAL PHARMACOLOGY						
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM						
THE FORM OF TRAINING	Full-time	Full-time						
PROFESSION	Doctor	Doctor						
FACULTY	General Medicin	ie						
COURSE	VI	VI SEMESTER XII						
ACADEMIC YEAR	2020-2021							

CREATOR	Nelli Ghukasyan, Harutyun Hovhannisyan
PHONE	+374 55 49 41 49, +374 77 36 07 72
E-MAIL	nellka2011@gmail.com, hovhannisyan84@gmail.com

CHAIR	Natural Sciences
CLINICAL BASE	-
HEAD OF THE CHAIR	PhD Hayarpi Javrushyan

Year	Semester	Credit	Academic week	Hours per week	Total hours	Auditorium hours	Lectures (hours)	Practice (hours)	Individual work (hours)	Consultation by lecturer	Examination	Test
VI	XII	3	17	3	90	51	18	33	26	13		+
Total		3	17	3	90	51	18	33	26	13		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- 1. Properties of water and aqueous solutions, water-electrolyte balance of the human body, colligative properties of solutions (diffusion, osmosis, osmolality, osmolality), the structure and function of the most important chemical compounds (nucleic acids, natural proteins, water-soluble and fat-soluble vitamins, hormones, etc.):
- 2. Structure of the human organism, including cellular, tissue, organ, organ system, and whole organism structural levels.
- 3. Normal activity of the human body, including hemostasis, homeostasis, cardiovascular, digestive, excretory systems, features and mechanisms of hormone synthesis.
- 4. Features of the human body in pathological conditions, mechanisms of disease development and features of the process.
- 5. The structure and function of the immune system.
- 6. Types of viruses, fungi and bacteria, structural features.

## **Aabilities:**

1. To use educational, scientific, popular scientific literature and the Internet for professional activities.

## Possessions:

1. Drug groups including classifications, mechanisms of action, indications, side effects, contraindications.

## 2. BRIEF CONTENT OF THE COURSE

"Clinical pharmacology" is the science of the effects of drugs on the human body. It examines the pharmacokinetics and pharmacodynamics of drugs, side effects, indications and contraindications, drugfood, drug-drug interactions, and individual examples of drug-patient organism interactions.

# 3. GOAL OF THE COURSE

The goal of the course is to teach students the principles of rational drug therapy.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

## Know:

- K1. features of disease course, diagnosis and treatment,
- K2. the principles of rational use of drugs.

## Be able to:

A1. to justify the safest, most effective and affordable pharmacological choice to treat the given pathological condition.

## Possess:

P1. principles of drug interactions in the case of multidrug prescribing, excluding dangerous interactions.

## 5. LITERATURE

- 1. Chair material
- 2. Կլինիկական դեղաբանություն։ Ուս. ձեռնարկ, բ.գ.դ.Ն.Ռ. Միրզոյանի խմբ., ԵՊԲՀ, Երևան, 2011թ., 165 էջ։
- 3. <a href="https://www.amazon.com/gp/product/1259027597/ref=s9">https://www.amazon.com/gp/product/1259027597/ref=s9</a> acsd topr hd bw b16ROL c x w?pf rd m=ATVPDKIKX0DER&pf rd s=merchandised-search
  5&pf rd r=BXNMNA2FH8N6SSYNQMGE&pf rd t=101&pf rd p=8ea58ca0-356f-5f0b-8649
  07198ac2a0af&pf rd i=16311601Bertram G. Katzung, Basic & Clinical Pharmacology, 12th edition, 2012.
- 4. Ritter JM, et al. A Textbook of Clinical Pharmacology and Therapeutics. 5<sup>th</sup> ed, London, 2008, 476p.
- 5. Оксвордский справочник по клинической фармакологии и фармакотерапии, Д. Г. Грэхам-Смит, Дж. К. Аронсон, 2000
- 6. Клиническая фармакология, Кукес 2006.

6. ASSESSMENT COMPONENTS	POINT
Attendance	16
Development of knowledge acquisition, capacity and skills	70
Individual work	14

7.110000011111 (1 0 10 11111 (1 0 ) 0 10 11111									
Mark	Assessment Point	Assessment letter							
"Excellent"	96-100	A+							
Excellent	90-95	A							
"Good"	80-89	B+							
Good	70-79	В							
"Satisfactory"	60-69	C+							
Satisfactory	51-59	С							
"Unsatisfactory"	50 and less	D							
"Tested"	≥51	S							
"Untested"	< 51	U							

NAME OF THE COURSE	DERMATOVENERE	DERMATOVENEREOLOGICAL DISEASES						
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM						
THE FORM OF TRAINING	Full time	Full time						
PROFESSION	Doctor	Doctor						
FACULTY	General Medicine	General Medicine						
COURSE	IV SEMESTER VII							
ACADEMIC YEAR	2020-2021							

CREATOR	Areg Chalabyan
	Mikael Mkhitaryan
PHONE	+374 98 52 43 04, +374 98 42 16 82
E-MAIL	chalabyan.areg@gmail.com, <u>dr.mkhitaryan@outlook.com</u>

CHAIR	Therapeutic subjects
CLINICAL BASE	-
HEAD OF CHAIR	Ph.D. Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
IV	VII	4	17	4	120	68	24	44	34	18		+
Total		4	17	4	120	68	24	44	34	18		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# **Knowledge**

- 1. The main physical phenomena and patterns underlying the processes in the human body, the essence of the biochemical processes in the child's and adolescent's organism at the cellular molecular level.
- 2. General patterns of human ontogenesis and anthropogenesis, emergence and development of life. Anatomical and physiological, age-sex individual characteristics of the structure and development of the body of healthy and sick children and adolescents.
- 3. The essence of biochemical processes in the organism at the molecular, cellular level. Anatomical and physiological, age-sex individual structural and developmental features of the structure and development of a healthy and sick organism. Modern clinical, laboratory and instrumental diagnostic methods of patients, general principles and features of diagnosis of hereditary diseases and birth defects.
- 4. Principles of etiology, pathogenesis, morphogenesis, pathomorphosis, general nosology, classification of diseases. As a result of contact in the external environment, regulation and self-regulation of the body's functional systems in normal and pathological processes.
- 5. The basis of the characteristics of the main physical phenomena of the processes taking place in the human body. The nature of biochemical processes in the patient's organism at the cellular, molecular level.
- 6. Basic characteristics and classification of medicine, pharmacodynamics and pharmacokinetics,

- indications and contraindications, side effects. The use of basic antibacterial, antiviral, biological medicine.
- 7. Morphology and physiology of pathogenic microorganisms and viruses affecting the body, classification, microbiological diagnostic methods, use of basic antibacterial, antiviral and biological medicine.
- 8. Development of skin diseases due to nutritional disorders.
- 9. Eye damage in skin and venereal diseases.
- 10. Nervous and neuropsychic aspects in dermatovenerology.
- 11. Neurological and neuropsychological perspectives in dermatology.
- 12. Methods of organizing emergency medical care in life-threatening situations.
- 13. Relation of Dermatology to Radiology and Roentgenology.
- 14. Affection of female genital organs during skin and sexually transmitted diseases.
- 15. basic characteristics and classification of medicine, pharmacodynamics and pharmacokinetics, indications and contraindications, side effects. Concepts of disease etiology, pathogenesis, morphogenesis, pathomorphosis, classification, general nosology. Etiology, pathogenesis, diagnosis, treatment of the most common diseases. Modern clinical, laboratory and instrumental diagnostic methods for therapeutic, surgical, infectious patients, general principles and features of diagnosis of hereditary diseases and birth defects.
- 16. Features of the course, clinic and possible complications of diseases that often spread in a typical manner. Modern methods of clinical, laboratory, instrumental diagnosis of the patient. The selection of effective medicine during the treatment of the main pathological symptoms, their clinico-pharmacological characteristics.
- 17. Implementation of epidemiological, anti-epidemic measures of infectious and parasitic diseases, protection of the population in centers of particularly dangerous infections. Features of the course of the most common diseases that typically occur in patients, clinical picture, possible complications.
- 18. Modern clinical, laboratory and instrumental diagnostic methods of therapeutic, surgical, infectious nature of patients, general principles and features of diagnosis of hereditary diseases and congenital defects. Effective selection of medicine in the treatment of the main pathological symptoms, clinical-pharmacological characteristics of the main groups of medicine.
- 19. Etiology of infectious and parasitic diseases, issues of epidemiology, including lesions of the skin and its appendages.

## **Abilities**

- 1. Analysis of the assessment of the histophysiological state of various cellular, tissue and organic units in children and adolescents.
- 2. Principles of pathogenetic therapy of the most common diseases, substantiate the nature of the pathological process, clinical expression.
- 3. Recording the results of laboratory and instrumental studies necessary to identify pathological processes in the body. Collection of anamnesis, conducting a patient interview, physical examination of patients of different age groups (examination, palpation, auscultation, pressure measurement, determination of the nature of pulse, respiratory rate), referral of the patient for laboratory and instrumental examination, consultation with other specialists.
- 4. To establish the principles of pathogenetic therapy of the most common diseases, the nature of the pathological process and clinical expressions.

- 5. Justifying the results of basic laboratory and functional diagnostic methods for the purpose of distinguishing pathological processes in the body and organ-systems.
- 6. Pharmacokinetics and pharmacodynamics of medicine, dispensing prescription.
- 7. Justifying the nature of the pathological process, the clinical expression, the principles of pathogenetic therapy of the most common diseases.
- 8. collecting anamnesis, conducting an interview of patients, conducting a physical examination of patients in different age groups (examination, palpation, auscultation, determination of blood pressure, the nature of the pulse, the frequency of breathing), referral of patients for laboratory instrumental examination and consultation of other specialists. Explanation of investigation results, planning of additional investigation for the purpose of confirmation of presumed diagnosis of patients, formulation of clinical diagnosis. Development of principles of treatment depending on the nature of the course of the disease, application of traditional treatment methods, conducting rehabilitation measures.
- 9. Deciphering the results of frequently used functional diagnostic methods to detect pathological processes in organs and organ-systems of patients. Substantiation of pathogenetic therapy of common diseases, the nature of the pathological process and its clinical manifestations. Promotion of a healthy lifestyle.
- 10. Collection of life anamnesis and development of the disease, conducting an interview of children and adolescents, conducting a physical examination of patients in different age groups: examination, palpation, auscultation, measurement of blood pressure, determination of the nature of the pulse, frequency of breathing, assessment of physical and sexual development, referral of the patient for laboratory-instrumental examination and consultation from other specialists. Conducting an interview with children, adolescents, and parents about increasing the body's resistance and recurrence of the disease, using different tempering methods. Promotion of a healthy lifestyle.
- 11. collecting anamnesis, conducting an interview, conducting a physical examination of patients in different age groups (examination, palpation, auscultation, determination of blood pressure, pulse nature, breathing frequency), referral of patients for laboratory-instrumental examination, consultation of other specialists. Analysis of research results, determination of presumptive diagnosis, planning of additional investigations to confirm the diagnosis, formulation of clinical diagnosis, development of principles of treatment depending on the nature of the course of the disease, using traditional treatment methods, conducting rehabilitation measures.

## **Possessions**

- 1. Concepts of the medical-anatomical system.
- 2. Interpretation of the results of laboratory and instrumental methods.
- 3. Skills of making a preliminary diagnosis based on the results of laboratory and instrumental investigations.
- 4. Prescribing medicines for various diseases, pathological situations, treatment, prevention, rehabilitation.
- 5. Possessing the skills of making a presumptive diagnosis based on the results of laboratory and instrumental research. Prescribing medicine in case of treatment, prevention, rehabilitation of pathological conditions of various diseases.
- 6. Record of preliminary diagnosis based on instrumental and laboratory investigations results. Conducting general clinical examination methods of children and adolescents. Analysis of the results of instrumental and laboratory diagnostic methods for children and adolescents.
- 7. Application of general clinical research methods. Analysis of the results of instrumental and

- laboratory diagnostic methods. Preliminary diagnosis and referral to other specialists for additional investigations, implementation of large-scale clinical diagnostic algorithms.
- 8. Implementation of therapeutic measures of first aid to children and adolescents in urgent and life-threatening situations and the basic medical diagnostic algorithm.

## 2. BRIEF CONTENT OF THE COURSE

The course examines frequently encountered skin and sexually transmitted diseases, their prevention, examination, and detection methods

# 3. GOAL OF THE COURSE

The goal of teaching the subject "Skin and veneral diseases" is to provide knowledge of general and private dermatology, and to form knowledge of the etiology and pathogenesis of dermatoses and sexually transmitted diseases, principles of diagnosis, treatment, location in the mucous membrane of the oral cavity.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

## **Know**

- **K1.** the legal basis of the state policy in the field of immunoprevention,
- **K2.** normative acts for the prevention of hospital-acquired infection,
- **K3.** basic legal documents for anti-epidemic service of the population in case of infectious and parasitic diseases,
- **K4.** the basics of prevention and diagnosis of skin diseases, skin lesions, the main skin manifestations that occurred during somatic diseases,
- **K5.** sexually transmitted diseases, their prevention, diagnosis, treatment and routes of transmission,
- **K6.** the main therapeutic algorithms used in dermatology.
- **K7.** to confirm the diagnosis and to obtain reliable data, according to the outcome of the disease, to plan the volume of additional investigation,
- **K8.** the basics of sanitary-epidemiological legislation for the well-being of the national population.

# Be able to

- **A1.** plan, evaluate, analyze the quality of medical care of the population and the impact of the production environment and surrounding factors on health,
- **A2.** taking into account the gender-age, socio-professional characteristics of the population, participate in the organization of medical-preventive, sanitary-anti-epidemic aid,
- **A3.** in emergency situations, to provide first aid to the victims in the outbreak,
- **A4.** evaluate the results of dispensary control of treated and chronic patients,
- **A5.** perform preventive, hygienic and anti-epidemic events, collect anamnesis, determine the patient's status, conduct an interview of the patient and relatives, perform a physical examination (examination, palpation, auscultation, blood pressure measurement, pulse identification). For the purpose of first aid, evaluate the initial examination of the nervous, endocrine, respiratory, circulatory, genitourinary, ENT-systems,
- **A6**. develop a plan of therapeutic (surgical) actions, taking into account the process of the disease and its treatment,
- **A7**. assess the safety and effectiveness of the treatment, determine the ways, regimen and dosages of medicine, justify the pharmacotherapy in the case of the main pathological symptoms, give the formulation of the instructions for the selected treatment method, taking into account etiotropic and pathogenetic agents,
- **A8.** to use primary and secondary preventive methods (on the basis of evidence-based medicine) in medical activities, to highlight the cause-and-effect relationship of the influence of living environment factors on health changes,

- **A9.** identify a dermatoveneritis patient in his surroundings, at home, at work, give appropriate instructions, advice, organize decontamination (scabies, fungal diseases, syphilis, etc.) and send to appropriate medical facilities,
- **A10.** to use the different methods of introduction of medicine, to establish a presumptive diagnosis, to highlight the etiology of the disease,
- A11. to carry out public health measures in age and gender groups,
- A12. carry out healthy diet counseling,
- **A13.** to plan and conduct preventive measures for diseases that are often encountered in the national population.

## Possess

- **P1.** Correct filling of medical documents,
- P2. extensive algorithms for clinical diagnosis,
- P3. analysis of the results of laboratory, instrumental diagnostic methods
- **P4**. basic medical diagnostic and treatment measures for organizing first aid in life-threatening situations and emergency situations,
- **P5.**techniques of the main interventions of skin diseases: performing manipulations, prevention, dispensation,
- **P6.** formulation of clinical diagnosis,
- P7. additional examinations for confirmation of diagnosis,
- **P8.** consultation and emergency care of patients with skin and venereal diseases.

# 5. LITERATURE

- 1. Chair material
- 2. Бутов Ю.С. Кожные болезни и инфекциии, передаваемые половым путем. М.,2002.
- 3. ...Кожные и венерические болезни (учебник для врачей), Ю. К. Скрипкин, М.-2000.688с.
- 4. Лобзин Ю.В., Ляшенко Ю.И., Позняк А.JI. Хламидийные инфекции. Руководство для врачей. С-Петербург, «Фолиант», 2003.
- 5. Прохоренков В.И. Сифилис. Иллюстрированное руководство. М., Изд-во «Медицинская книга», 2002. 297с.
- 6. Ситкевич А.Е., Казеко А.Г. Профилактика и лечение аллергических заболеваний кожи.
- 7. Фармакокинстический справочник дерматолога Ю.К. Скрипкин. М. «МЕДпресс», 2001. 432с.
- 8. В.П. Адаскевич, В. М. Козин -,, Кожные и венерические болезни,, –учебное руководство, Москва, мед. Литер.,2006.
- 9. А.Н.Родионов, справочник по кожным и венерическим заболеваниям, 3-е издание, Питер-2005,
- 10. Մ.Ե.Միրաքյան, "Մակերեսային սնկային հիվանդություններ, Երևան, "Հայաստան, 2003։
- 11. Doctors.am, բժշկական տեղեկատու, www.doctors.am,
- 12. Med Practik առողջության համար, բժշկական տեղեկատու, www.med.practic.am,
- 13. L. Goldsmith, S. Katz, B. Gilchrest, A. Paller, D. Leffell, K. Wolff, Fitzpatrick's Dermatology in General Medicine, 8th edition, New York, 2008,
- 14. Thomas P. Habif Clinical Dermatology, 2009, 5th Edition, Amsterdam, 2016.
- 15. Rook's Textbook of Dermatology,8th Edition, 4 Volume, 2010.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

7. ASSESSMENT SYSTEM /RATING / SYSTEM								
Mark	Assessment Point	Assessment letter						
"Excellent"	96-100	A+						
	90-95	A						
"Good"	80-89	B+						
	70-79	В						
"Satisfactory"	60-69	C+						
	51-59	С						
"Unsatisfactory"	50 and below	D						
"Tested"	≥51	S						
"Untested"	< 51	Ū						

NAME OF THE COURSE	DISEASES OF THE NOSE, THROAT, EAR						
TYPE OF COURSE	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time	Full time					
PROFESSION	Doctor						
FACULTY	General Medicine	General Medicine					
COURSE	IV SEMESTER VIII						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Robert Frangulyan
	Lilit Petrosyan
PHONE	+374 10 53 46 50, +374 77 65 53 35
E-MAIL	petrosyan.lil@gmail.com

CHAIR	Surgical subjects
CLINICAL BASE	"Shengavit" Medical Center
HEAD OF CHAIR	MD prof., Professor A. Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
IV	VIII	3	13	4	90	52	24	28	24	14		++
Total		3	13	4	90	52	24	28	24	14		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# **Knowledge**

- 1. at the levels of human organs, organ-systems and organism.
- 2. in a diseased state, disorders in the normal structure of human organs and tissues;
- 3. organizational-physiological, gender-age-individual characteristics of the evolution of a healthy versus diseased organism's structure;
- 4. relationships between organs and tissues in different topographic locations, allowing for a better understanding of pathogenesis, progression, and dissemination of disease processes;
- 5. the study of operational access procedures, as well as general surgical principles;
- 6. the fundamentals of surgical diagnosis, treatment, and anesthesia;
- 7. the most comprehensive way of treatment is based on the etiology of pathological disorders, pathophysiology, clinic, and diagnostic aspects;
- 8. physiological characteristics of diseased and morbid conditions in the organism; functional modifications; in organ systems during severe internal organ disorders;
- 9. the etiology, pathogenesis, clinic, and characteristics of orthopedic disorders and injuries, as well as the most comprehensive treatment technique.

# **Abilities**

- 1. Conduct physical examinations on a living individual, including palpation, percussion, and auscultation.
- 2. Autopsy; the examination of a corpse's tissues and organs.
- 3. Analyze the electrocardiography, respiration thermometry, and hematological markers data.
- 4. Make a surgical connection, correctly use the surgical equipment, disconnect and reconnect the tissues, and stop the bleeding while you're doing it.
- 5. Follow the antiseptic asepsis regulations;
- 6. Use temporary and permanent techniques to stop bleeding;
- 7. Provide limb immobilization;
- 8. Determine blood group affiliation with standard serums and standard erythrocytes;
- 9. Apply bandages and use certain forms of local anesthetic.
- 10. Organize strictly surgical checkups and treatments for surgical patients.

## **Possessions**

- 1. Memoir collection. Completion of medical history.
- 2. Performing medical examination methods on the patient.
- 3. Techniques for controlling bleeding temporarily or permanently.

## 2. BRIEF CONTENT OF THE COURSE

The "Nose, Throat, Ear Diseases" course examines the subject of otorhinolaryngology, development and connection with other disciplines, clinical anatomy of the nose, protective role in the body, rhinitis, acute and chronic inflammation of the nasal sinuses, nasal septum curvature, overgrowth of shells, pharynx, clinical anatomy. , hyperplasia of the tonsils, adenoid hyperplasia, angina, laryngitis, laryngitis, false croup, acute stenosis of the larynx and trachea, ear, external ear diseases, acute and chronic otitis, inflammation of the auditory nerve, clinic, drug treatment, Meniere's disease, otosclerosis.

## 3. GOAL OF THE COURSE

The goal of the course is to teach students about disorders of the nose, throat, and ear, their symptoms, and how to diagnose and treat diseases using contemporary instrumental, X-ray, clinical, and other approaches.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

# Know

- K1. Clinical anatomy and physiology of ENT organs
- K2. Basic diagnostic procedures for ENT diseases;
- K3. Methods of treatment: conservative and surgical.

#### Be Able to

- A1. distinguish between contrasting and non-contrasting x-ray photography.
- A2. execute external and middle ear instrumental examination methods.
- A3. comment on the procedures of radioscopic examination.
- A4. identify the causes of nosebleeds.
- A5. give an example of a normal rhinoscopic picture.
- A6. provide a comment about congenital ear, nose, and throat disorders.
- A7. describe laryngoscopy, pharyngoscopy, as well as tracheoscopy data.

## Possess

- P1. Drainage in purulent disorders, ear cleaning
- P2. Cleaning the external auditory canal, eliminating the foreign body of the external auditory canal by washing;
- P3. Injection of ear drops, blowing powder medicine into the ear,
- P4. Bloating in the middle ear, according to Politzer
- P5. Hearing acuity is measured by whispered voice test, tuning fork, and instrumental audiometry.
- P6. Nasal cavity examinations: rhinoscopic, nasal endoscopy, nasopharyngeal and other cavities palpation
- P7. Tamponade of the nasal cavity, both anterior and posterior.

## 5. LITERATURE

- 1. Chair material
- 2. Կ.Գ.Շուքուրյան, Վարդանյան Ա.Ս., «Քթի, կոկորդի, ականջի հիվանդություններ», Երևան, 1992թ.
- 3. Y. Chan, J. Goddard, "KJ Lee's Essential Otolaryngology", New York, 2015.
- 4. P. Probst R., Grevers G., Iro H. "Basic otorhinolaryngology", London; 2006; 440p.
- 5. 15. Пальчун, В. Т. Болезни уха, горла и носа / В.Т. Пальчун. М.: ГЭОТАР-Медиа, 2010. 324 с.
- 6. Bailey's Head and neck Surgery, Otolaryngology
- 7. Paul W.Flint and 4 more `Cummings Otolaryngology ,Head and neck Surgery

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

7. ASSESSMENT SYSTEM /RATING / SYSTEM									
Assessment Point	Assessment letter								
96-100	A+								
90-95	A								
80-89	B+								
70-79	В								
60-69	C+								
51-59	С								
50 and below	D								
"Tested" ≥51									
< 51	U								
	Assessment Point  96-100 90-95 80-89 70-79 60-69 51-59 50 and below ≥51								

NAME OF THE COURSE	PSYCHIATRY						
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	VI SEMESTER XII						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Anna Chilingaryan, Lusine Arzumanyan
PHONE	+374 98 26 26 90, +374 91 78 46 84
E-MAIL	ani70march@mail.ru lusinearz@mail.ru

CHAIR	Therapeutic subjects
CLINICAL BASE	National Centre For Mental Health Care CJSC
HEAD OF CHAIR	PhD Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XII	3	17	3	90	51	24	27	25	14		+
Total		3	17	3	90	51	24	27	25	14		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## Knowledge

- 1. Ethics and deontology in medicine, taking into account the characteristics of the sick organism, the laws of dialectical materialism in medicine.
- 2. Individual features of the anatomiophysiological and age-sex structure and development of healthy and diseased organisms, the structure, topography and development of cells, tissues, organs and systems, cooperation of their functions in normal and pathological conditions, organ changes and population features at the levels of life formation.
- 3. The microstructure of tissues and cells of the human body.
- 4. Study of metals, microelements with a certain biological role in human activity, buffer systems maintaining poststasis.
- 5. The basic laws of physics, the physical phenomena and patterns underlying the main processes in the human body. Characteristics of physical factors affecting the human body and biophysical mechanisms of influence.
- 6. The main metabolic processes in the body to detect disorders of protein, carbohydrate and fat metabolism, the basic biochemical indicators of blood to evaluate the state of protein, carbohydrate and fat metabolism, knowledge of the participation of various organ systems in metabolism to detect pathologies of the liver, gastrointestinal system, kidneys, cardiovascular system.

- 7. Functional systems of the human organism, their regulation under the influence of the external environment and self-regulation in normal and pathological conditions.
- 8. Basic knowledge about immunity, its types, forms of expression. The role of immunity during the infectious process. Characteristics of the main reactions of humoral immunity.
- 9. About the structure, development and vital activity of the tissues of the human organism, as well as the levels of the structure, development and vital activity of the tissues of an individual organism,
- 10. The anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and ill organism, the functional systems of the human organism, their regulation and self-regulation when interacting with the external environment, in normal and pathological conditions.
- 11. Morphological changes during diseases of internal organs, different clinico-anatomical variants of diseases, complications of acute and chronic processes of all nosological forms.
- 12. Clinical methods of examination of therapeutic patients. Laboratory and instrumental examination of patients (temperature measurement, spirometry, blood pressure, venous pressure measurement, determination of blood flow rate, gastric and duodenal probing, examination of sputum, blood, urine, feces, gastric juice examination, ECG). Theoretical understanding of the main laboratory-instrumental examinations conducted by specialists (endoscopy, radioisotope examination, ECG, phonocardiography, echocardiography, biopsy, sternum puncture data, examination of the function of external respiration), respiratory, blood supply, digestive systems, liver, kidneys, blood system, musculoskeletal the main clinical symptoms in system diseases and the ability to group their typical syndromes. Compiling the patient's examination data in the form of a medical history.

# **Abilities**

- 1. the identification of anatomical orientations necessary for physical examinations of a living person (palpation, percussion, auscultation),
- 2. interpret the results of the most common methods of functional diagnostics, which are used to identify damage to the blood, heart and vessels, lungs, liver, other organs and systems, determine and evaluate the results of electrocardiography, spirometry and thermometry.

## **Possessions**

- 1. Medical-anatomical concepts.
- 2. Basic methods of patient care and basic nursing manipulations.
- 3. Clinical and some instrumental methods of examining therapeutic patients.

# 2. BRIEF CONTENT OF THE COURSE

The course "Psychiatry" consists of "General psychopathology" and "Private psychiatry" sections and studies the causes of development of mental diseases, clinical manifestations, their prevention, treatment and organization of appropriate help.

# 3. GOAL OF THE COURSE

The goal of the course is to acquaint the students with the basics of psychiatry, in part, general psychopathology, individual mental illnesses, their clinical manifestations and distinguishing diagnostic features, establish a connection with other medical disciplines and form a clinical mindset in the student on the basis of the knowledge gained during the course.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

## Know

- K1. Etiology, pathogenesis, modern classification of the most common psychiatric disorders.
- K2. The clinical picture of psychiatric disorders, features of the course, possible complications,
- K3. The main methods of diagnosis of psychiatric diseases, the criteria of differential diagnosis.
- K4. Features of examination of psychiatric diseases.
- K5. Basic methods of treatment of psychiatric diseases.

#### Be able to

A1. determine the patient's condition: collect anamnesis, conduct an interview with the patient and/or his relatives, conduct a physical examination of the patient, assess the patient's condition to determine the need to provide him with medical care.

## **Possess**

P1. Analysis of investigation results.

## 5. LITERATURE

- 1. Chair material
- 2. Child and adolescent psychopathology M. A. Melik-Pashayan, Gevorgyan, M. G. Yeghiyan, 2005
- 3. A. E. Melik-Pashayan, "Psychiatry", Yerevan, 2012
- 4. Bukhaenovsky A.R., Kutyavin Yu.A., Litvak M.E., "General psychopathology ", Textbook, Rostov-on-Don, 1992
- 5. B.L. Gazhenko, Propaedeutics of Psychiatry, textbook-Postov-on-Don 2003
- 6. "Psychiatric Disorders", Professional Care Guide, Springhouse Corporation, Pennsylvania, 1995
- 7. B.J. Sadock, V.A. Sadock, "Kaplan & Sadock's Synopsis of Psychiatry. Behavioral Sciences/Clinical Psychiatry", 9th edition, Lippincott Williams & Wilkins, USA, 2003
- 8. DSM-IV-TR (Diagnostic and Stastistical Manual of Mental Disorders). 4th ed. 2005
- 9. General psychopathology A.B. Bukhanovsky, Rostov-on-Don, 2000

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	OPHTHALMOLOGIC DISEASES						
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	V SEMESTER IX						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD associate professor, Anahit Vardanyan, Marine Kirakosyan
PHONE	+374 91 38 75 30, +374 91 99 00 91
E-MAIL	marina.kirakosyan1@gmail.com

CHAIR	Surgical Subjects
CLINICAL BASE	"Nairi" MC
HEAD OF CHAIR	M.D. PhD A. Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	IX	4	17	4	120	68	24	44	34	12	6	
Total		4	17	4	120	68	24	44	34	12	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge**

- 1. At the levels of human organs, organ-systems and organism.
- 2. About disorders of the normal structure of human organs and tissues in a diseased state.
- 3. The anatomical-physiological, sexual-age and individual characteristics of the structure and development of a healthy and sick organism;
- 4. Relationships of organs and tissues in separate topographic regions, which provides an opportunity to understand the ways of the emergence, development and spread of pathological processes.
- 5. General principles of operations, including the study of operative accesses and methods.
- 6. Basic principles of diagnosis, treatment and anesthesia in surgery.
- 7. Physiological features of pathological and pathological states of the organism, functional changes of organ systems during the main diseases of internal organs.
- 8. The etiology, pathogenesis, clinic, diagnostic features and the most complete method of treatment of internal diseases.

#### **Abilities**

1. Perform physical examinations of a living person, such as palpation, percussion, auscultation.

- 2. determine and evaluate the results of electrocardiography, spirometry and thermometry, hematological indicators;
- 3. Perform surgical suturing and ligation, use surgical instruments correctly, cut and join tissues, and stop bleeding in the process.
- 4. Apply the rules of aseptic and antiseptic,
- 5. Stop bleeding, with temporary and final methods,
- 6. Determine blood group affiliation with standard sera and standard erythrocytes,
- 7. use some methods of local anesthesia,
- 8. Place types of bandages.
- 9. to organize purely therapeutic examinations and treatments of patients.

# 2. BRIEF CONTENT OF THE COURSE

"Ophthalmologic Diseases" course examines the history of the development of ophthalmology, embryonic development of the eye, anatomy of the eye, pupil, structure, accessory organs of the eye, their role, eye membranes, contents of the eyeball cavity, nutrition of the eyeball and its accessory parts, hemodynamic features, visual pathway, eyeball and the innervation of the lens, physiology of the eye, photosensitivity, adaptation, pigmentation, central and peripheral vision, binocular vision, eye refraction and accommodation, complications of different types of refraction, types of corneal lesions, corneal diseases, complications, outcomes, choroidal diseases clinic, complications, treatment principles, lens damage, course, conservative and surgical treatment methods, types of retinal damage, treatment principles, optic nerve diseases, glaucoma, types, acute attack, treatment.

# 3. GOAL OF THE COURSE

The goal of the course is to teach diseases of the visual organ, etiology, pathogenesis, clinic, diagnosis, treatment, connection of eye diseases with other diseases, performance of some functional eye examinations.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

# **Know**

**K1.** clinical anatomy and physiology of the visual organ, the main methods of diagnosis, prevention and treatment of diseases and injuries of the visual organ: conservative and surgical.

# Be able to

- A1. perform external ophthalmoscopic examinations of the eye and its supporting system,
- **A2.** determine and evaluate the anatomical elements of the eye during the examination,
- **A3.** perform visual acuity testing, color vision and visual field determination procedures.

## **Possess**

- P1. the use of eye drops and salves,
- **P2.** prescription of glasses in case of different types of refractions,
- P3. mono- and binocular bandaging methods.

## 5. LITERATURE

- 1. Chair material.
- 1. Офтальмология: учебникдлявузов / Подред. Е.А. Егорова М. : ГЭОТАР-Медиа, 2010. 240 с.
- 2. Глазныеболезни: Учебник / Под ред. В. Г. Копаевой. М.: Медицина, 2008. 560 с.: ил. (Учеб. лит. Для студентов мед. вузов)
- 3. Глазные болезни. Основы офтальмологии : учебник / [Э. С. Аветисов и др.] ; под ред. В. Г. Копаевой. М. : Медицина, 2012. 552 с. : ил. (Учебная литература для студентов медицинских вузов)

- 4. Oxford Handbook of Ophthalmology; Alastair Denniston (Editor); third edition; Oxford, Medical Handbooks; 2014. 1027p
- $5. \quad Kanski's \ Clinical \ Ophthalmology; \ 8th \ Edition; \ Saunders \ Ltd. \ 2015.-928p.$

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	NEUROLOGY			
TYPE OF COURSE	Mandatory	Mandatory		
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL		
	PROGRAM			
THE FORM OF TRAINING	Full time			
PROFESSION	Doctor			
FACULTY	General Medicine			
COURSE	IV	SEMESTER	VII, VIII	
ACADEMIC YEAR	2020-2021			

CREATOR	PhD Narek Mkrtchyan
PHONE	+374 77 84 49 94
E-MAIL	narksm@gmail.com

CHAIR	Therapeutic subjects
CLINICAL BASE	"St. Grigor Lusavorich" MC
HEAD OF CHAIR	PhD A. Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
137	VII	4	17	4	120	68	22	46	34	18		+
IV	VIII	3	13	4	90	52	18	34	20	12	6	
Total		7	30	8	210	120	40	80	54	30	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge

- 12. the features of the anatomical structure of the human body at the level of organs and organ systems, in particular the features of the nervous system, its division and private issues,
- 13. structural features of cells, tissues and organs, particularly neural morphological features, methods of their study,
- 14. the anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and sick organism, the physiological activities of the nervous system, its mechanisms.
- 15. about disorders of the normal structure of human organs and tissues in a diseased state,

## **Abilities**

- 4. analyze the features, functional significance, formation of channels of the anatomical formations of the nervous system,
- 5. to evaluate the histophysiological state of cells, tissues and organs of the human body,
- 6. determine and evaluate the results of electrocardiography, spirometry and thermometry,

- hematological indicators,
- 7. physiological features of pathological, pathological states of the organism; functional changes of organ systems, in particular, during the main diseases of the nervous system, internal organs

## **Possessions**

- 1. perform physical examinations of a living person, such as palpation, percussion, auscultation,
- 2. skills of working with magnifying equipment.

# 2. BRIEF CONTENT OF THE COURSE

The subject of neurology studies the human nervous system, its features according to sections, diseases, differential diagnosis and treatments.

# 3. GOAL OF THE COURSE

The goal of the course is to teach the development patterns of the nervous system, investigation methods, etiology, pathogenesis and clinical manifestations of diseases. Familiarize with cerebral blood circulation disorders, as it is considered the main one in neurology, which is related to the manifestation of the peculiarities of the heart, genitourinary system and endocrine glands.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

## **Know**

- **K1**. The basics of neurology, the pathogenesis of the main diseases, clinical manifestation, diagnosis, treatment,
- **K2**. application of necessary medical measures in the presence of comatose states /first aid/,
- **K3**. the application of the main therapeutic /medication/ schemes during epilepsy, trauma, fainting /from various causes/.

## Be able to

- A1. Perform neurological examinations of the patient and interpret the obtained results.
- A2. To carry out differential diagnosis of diseases.

# **Possess**

- **P1.** To perform a spinal puncture.
- **P2**. Methods of invasive instrumental investigations.
- **P3**. Interpreting data from related professional disciplines to provide neurological treatments. Differentiation of diabetic, uremic, epileptic and post-traumatic comas.

## 5. LITERATURE

- 1. Chair material
- 2. G. I Mirzoyan, "Nervous diseases", Yerevan, 1988.
- 3. V.Triumfov, "Topical diagnosis of diseases of the nervous system", Moscow, 2007.
- 4. Duus. Topical diagnosius of neurological deseases.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В

"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	MEDICAL GENETIC	S		
TYPE OF COURSE	Mandatory	Mandatory		
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL		
	PROGRAM			
THE FORM OF TRAINING	Full time			
PROFESSION	Doctor			
FACULTY	General Medicine			
COURSE	IV	SEMESTER	VIII	
ACADEMIC YEAR	2020-2021			

CREATOR	PhD, DSc Karine R. Mayilyan,
PHONE	+374 99 177721
E-MAIL	k_mayilyan@mb.sci.am

CHAIR	Therapeutic subjects
CLINICAL BASE	"St. Grigor Lusavorich" MC
HEAD OF CHAIR	PhD Ara Arshamyan

000102   020112												
Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
IV	VIII	3	13	4	90	52	24	28	38	14		++
Total		3	13	4	90	52	24	28	38	14		++

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## Knowledge:

- 1. The structural organization of the genetic material, i.e. DNA and RNA molecules, and the main characteristics of the genomes of eukaryotic and prokaryotic organisms.
- 2. Varieties of biological materials and systems, forms of their organization, the theory of molecular mechanisms for normal biological functioning and pathological processes.
- 3. Eukaryotic cell structure, structure and functions of the cellular organelles, structure and components of the cellular membrane, cell metabolic mechanisms, signal transduction systems, and intracellular interactions.
- 4. General anatomical and physiological characteristics of the healthy and diseased organisms, the structure and development of human tissues, organs and systems, and their functional interactions in norm and pathology.
- 5. Non-modifiable (e.g. inheritance) and modifiable (e.g. smoking) factors, affecting the functional systems of a human organism, and the regulation of their effects in norm and pathophysiology.
- 6. General knowledge about internal and infectious diseases, and their classification categories and manifestation forms.
- 7. Methods of clinical investigation of patients, theoretical knowledge of laboratory analyses and diagnostic imaging techniques, which are used for the assessment of structural and

functional states of human organ systems in health and diseases, and the ability to group typical symptoms of common diseases.

## **Abilities**

- 1. The ability to access and use educational videos, tools and professional articles available on the internet platforms in English.
- 2. Skills to evaluate the most common methods of functional diagnosis used to detect pathology of blood, heart and vessels, kidneys, liver, and other organs and systems.
- 3. The logical reasoning on etiological and pathophysiological biology related to any disease and the ability to offer potential/plausible solutions to or prevention of these problems.

## **Possessions**

- 1. Major concepts of biology and genetics.
- 2. The battery for patient clinical investigation.
- 3. Fundamental knowlage of linear geometry and mathematics

## 2. BRIEF CONTENT OF THE COURSE

The course "Medical Genetics" is the branch of clinical and molecular medicine dealing with hereditary/genetic diseases. The course will give an overview of the structure and variation of the human genome, molecular-genetic and epigenetic mechanisms for development of single-gene, chromosomal and complex polygenic diseases, and will teach a number of interdisciplinary topics related to risk prediction, diagnosis, prevention, therapeutics and prognosis of hereditary and non-hereditary diseases.

# 3. GOAL OF THE COURSE

The goal of the course is to introduce the current knowledge on genetic and epigenetic basics of contemporary molecular medicine, genetic and environmental aspects of rare/monogenic and common/complex polygenic disorders, and up-to-date molecular-genetic, transcriptomic, pharmacogenetic and biotechnological approaches applied in the risk prediction, diagnosis, prevention, therapeutics and prognosis of a number of diseases.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

#### Know

- K1. the theoretical basics of Medical Genetics;
- K2. the genetics and molecular mechanisms of the aetiology and pathogenesis of a number of monogenic and polygenic diseases;
- K3. contemporary molecular-genetic approaches applied in diagnosis, therapeutics and prevention of a number of diseases;
- K4. strategies of development, validation and utilization of novel molecular-genetic approaches for the human health service;

K5.ethical, social, forensic and legal issues and regulatory norms in Medical Genetics.

## Be able to

- A1. use online resources and databases related to Medical Genetics;
- A2. use contemporary scientific literature related to Medical Genetics and genetic/genomic aspects of human diseases;
- A3. investigate molecular mechanisms underlying the generation and development of diverse human diseases, and assess their risks and prognoses of an outcome;
- A4. evaluate the role of environmental and hereditary factors and their interaction terms in the generation and development of complex polygenic disorders;
- A5. propose primary and/or additional molecular-genetic screening of patients' tissue specimens for

ascertainment and validation of a diagnosis;

A6. suggest personalized medicine for a patient based on his/her genetic ID.

#### Possess

- P1. A number of up-to-date molecular-genetic approaches for the diagnosis, therapeutics and prevention of diseases (theoretically).
- P2. Analyses and interpretation of the results of genetic-laboratory screening of the patients.
- P3. Statistical algorithms and software programs for case-control association studies and family-based association studies.

## 5. LITERATURE

## Main literature

- 1. Ивашкин В.Т., Минасян Г.А., Уголев А.М. Теория функциональных блоков и проблемы клинической медицины. Ленинград: Наука 1990, 303 с.
- 2. Репин В.С., Сухих Г.Т. Медицинская клеточная биология. Москва: БЭБиМ, 1998, 200с.
- 3. Bradley J., Johnson D., Rubenstain D. Lecture Notes on Molecular Medicine. Wiley-Blackwell (2nd edition), 2001, pp. 143.
- 4. Bronchud M.H., Foote M., Giaccone G., Olopade O., Workman P. Principles of Molecular Oncology. Springer (3rd edition), 2008, pp. 418.
- 5. Janeway Ch.A.Jr., Travers P., Walport M., Shlomchik M.J. Immunobiology: the immune system in health and disease. Garland Science (6th edition), 2005, pp. 823.
- 6. Reece R.J. Analysis of Genes and Genomes. John Wiley & Sons, Ltd, Chichester, UK, 2004, pp. 469.
- 7. Ron T., Trent R.J. Molecular Medicine: genomics to personalized healthcare. Elsevier Science & Technology, 2012, pp. 400.
- 8. Ross D.W. Introduction to Molecular Medicine. Springer (3rd edition), 2002, pp. 153.
- 9. Slack J. Essential developmental biology. Wiley-Blackwell, 2001, pp. 321.
- 10. Srivastava R. Apoptosis, cell signaling, and human diseases: molecular mechanisms. Humana Press, 2007, pp. 402.
- 11. Terrian D.M. Cancer Cell Signaling: methods and protocols. Humana Press, 2003, pp. 333.

## Additional literature

- 12. Фогель Ф., Мотульски А. Генетика человека. (в 3-х томах), Москва: Мир, 1990.
- 13. Jain K.K. The Handbook of Nanomedicine. Springer, 2008, pp. 403.
- 14. International Human Variome Project. www.humanvariomeproject.org
- 15. International Cancer Genome Consortium. www.icgc.org
- 16. 1000 Genome Project. <a href="www.1000genomes.org/page.php?page=home">www.1000genomes.org/page.php?page=home</a>
- 17. ENCODE project. <a href="https://www.genome.gov/10005107">www.genome.gov/10005107</a>
- 18. Human Epigenome Project. www.epigenome.org/index.php
- 19. International HapMap Project.http://hapmap.ncbi.nlm.nih.gov/index.html
- 20. The human genome at ten. Nature 2010; 464:649–50. http:// www.nature.com/nature/journal/v464/n7289/full/464649a.html

6. ASSESSMENT COMPONENTS	POINT				
Attendances	16				
Assessment of knowledge acquisition, abilities and skills					
Independent individual work					
7. ASSESSMENT SYSTEM /RATING / SYSTEM					

7. ASSESSMENT SYSTEM / RATING / SYSTEM									
Mark	Assessment Point	Assessment letter							

"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	ACUPUNCTURE						
TYPE OF COURSE	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	V SEMESTER IX						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Eleonora Minasyan						
	PhD Narek Mkrtchyan						
	Bagrat Khachatryan						
PHONE	+374 10 25 12 86, +374 77 84 49 94, +374 91 16 07 47						
E-MAIL	nazmara@mail.ru,	narksm@gmail.com,					
	bagratkhachatryan@gmail.com						

CHAIR	"Traditional medicine named after E. Minasyan"
CLINICAL BASE	SMTC
HEAD OF CHAIR	PhD Eleonora Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	IX	4	17	4	120	68	34	34	34	18		++
Total		4	17	4	120	68	34	34	34	18		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge

- 1. Anatomical structure and topography of organs.
- 2. Physiological functions of internal organ-systems and their mutual connection with each other.
- 3. Knowledge about the mechanisms of pathology development.
- 4. Therapeutic significance of medicine
- 5. Medicine as a philosophical science.

# **Abilities**

- 1. Visualize projection regions of internal organs.
- 2. Analyze the physiological states of the body's organ systems.
- 3. Differentiate clinical descriptions of pathology.
- 4. Distinguish the topography of anatomical structures (entities)
- 5. Make an adequate selection of the medicine according to the pathology of the organ systems.
- 6. Make a selection of herbs for the pathological conditions of the given organ system.
- 7. Analysis of pathological states according to cause-effect relationship.

#### Possessions

- 1. Ability to view the organism as a whole.
- 2. To see the organism as a whole, from the point of view of physiology.
- 3. Pathophysiological descriptions of pathological states.
- 4. Acupuncture technique according to anatomical tissue topography.
- 5. Combination of drugs with needle-burning therapy methods, in particular, correct selection of drugs during pharmacopuncture.
- 6. General basics of phytotherapy.
- 7. Philosophical worldviews and philosophical categories.

### 2. BRIEF CONTENT OF THE COURSE

"Acupuncture" is a philosophical science that has its own world views, functions (about the meridian system, internal organs, energy, blood and fluids and vital points). It studies the physiological foundations of the human body, the pathomechanisms of disease development, diagnostic methods (examination, inquiry, listening, palpation, instrumental research) and treatment methods: needle-burning therapy, which is world-renowned as zhen-tsyu therapy.

#### 3.GOAL OF THE COURSE

The goal of the "Acupuncture" course is to teach future doctors the theoretical and practical foundations of traditional Eastern medicine, diagnosis and treatment methods, to master needle-burning therapy in the complex of disease treatment, integrating it with modern medicine.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

#### Know:

- **K1.** Philosophical teachings of traditional Eastern medicine: In-yan, U-sin, Tszin-lo, Jan-fu, Shu-syue, energy, blood and fluids
- **K2.** the etiology and pathogenesis of the development of pathological conditions,
- **K3**. physiological basis and principles of acupuncture,
- **K4**. general characteristics of meridians, topography, way, main points and their therapeutic indications,
- **K5**. acupuncture in the complex of treatment of internal diseases.
- **K6**. acupuncture in the treatment complex of diseases of the musculoskeletal system,
- **K7.** acupuncture therapy in resuscitation

### Be able to

- **A1**. apply ways and methods of diagnosis and treatment accepted in the medicine of the Ancient East.
- **A2**. To use educational, scientific, popular literature and the Internet for professional activities.

#### Possess:

- P1. 4 methods of diagnosis (examination, inquiry, listening and palpation)
- P2. to the method of instrumental research: methods of Ryodoraku, Akabane
- **P3**. Point choice according to traditional medicine and reflexotherapy,
- **P4**. Acupuncture methods to affect vital points and zones on different parts of the body.
- P5. Method of bloodletting
- P6. acupressure method according to traditional and modern Eastern medicine,
- P7. method of auriculotherapy

# 5. LITERATURE

- 1. Chair material
- 2. Giovanni Maciocia 'The Foundations of Chinese Medicine'. Third edition. Third edition 2015

- 3. Atlas of Acupuncture C. Focks (Churchill Livingstone, 2008) BBS.
- 4. Acupuncture (Essentials of Chin ese Acupuncture), 1980.

6. ASSESSMENT COMPONENTS				
Attendances	16			
Assessment of knowledge acquisition, abilities and skills	70			
Independent individual work	14			

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	DENTISTRY						
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	VI SEMESTER XI						
ACADEMIC YEAR	2020-2021						

CREATOR	Arev Zeynalyan
PHONE	+374 41 15 10 55
E-MAIL	arevzeynalyan@gmail.com

CHAIR	Dentistry
CLINICAL BASE	-
HEAD OF CHAIR	PhD H. Hakobyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XI	3	17	3	90	51	24	27	27	12		++
Total		3	17	3	90	51	24	27	27	12		++

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 1. Peculiarities of anatomical structure of human organs, organ-systems, organism
- 2. Structural changes of normal structure of human organs and tissues in pathological conditions.
- 3. The anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and affected organism.
- 4. Structural and functional features of different organ systems and their relationship with the maxillofacial region.
- 5. Ways of occurrence, development and spread of pathological processes in organs and tissues.

### **Abilities:**

- 1. explain the structure, composition and functions of human organ systems
- 2. Perform physical examinations of a living human such as palpation, percussion, auscultation.
- 3. Apply the rules of aseptics and antiseptics

### Possessions:

1. be able to work with phantoms, skeletons, animal preparations, work with biological literature, lecture summaries, as well as work with the theoretical part of practical training.

### 2. BRIEF CONTENT OF THE COURSE

The "Dentistry" course examines the relationship between dental and general somatic diseases, the causes of the main dental pathologies, the clinical course, the principles of treatment and prevention.

### 3. GOAL OF THE COURSE

The goal of the class is to teach the organization of the dental office and equipment, dental tools, basic and additional methods of oral examination, dental diseases, patients' complaints, subjective and objective examinations, diagnosis, detection of connection between basic dental diseases and general pathologies.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- **K1** Organization and furnishing of the dental office.
- **K2** Dental therapeutic and surgical instruments.
- **K3** Basic and additional methods of patient examination.
- **K4** Subjective and objective examinations of dental patients.
- **K5** Odontogenic and non-odontogenic diseases of maxillofacial region, their clinic course and diagnosis:

### Be able to:

- **A1** Examine and identify defects in the oral cavity.
- **A2** Compile medical documents: preliminary examination of the patient, collection of anamnesis, formulation of the dental formula, filling out the medical card
  - A3 Make a plan for laboratory and instrumental examinations of diseases of the maxillofacial region

### Possess:

- P1 Methods of examination of patients with lesions of the oral cavity, maxillofacial region.
- P2 Clinical diagnosis of patient and approval of diagnosis based on differential diagnosis

### 5. LITERATURE

1. Chair material

- 2. G. Byrne, Fundamentals of Implant Dentistry, Dublin, 2014;
- $3. \quad N. \; Malik, Textbook \; of \; Oral \; and \; Maxillofacial \; Surgery, \; London, \; 2012$
- 4. Հարությունյան Ա., Թերապևտիկ ստոմատոլոգիայի պրոպեդևտիկա, Երևան 2009

6. ASSESSMENT COMPONENT	POINT					
Attendances		16				
Assessment of knowledge acquisi	ition, abilities and skills		70			
Independent individual work			14			
7. ASSESSMENT SYSTEM /RAT	ING / SYSTEM					
Mark	Assessment Point	letter				
"Excellent"	96-100	A+				
	90-95 A					
"Good"	"Good" 80-89 B+					
70-79 B						
"Satisfactory"	"Satisfactory" 60-69 C+					
	51-59 C					
"Unsatisfactory"	50 and below D					
"Tested"	≥51	S				
"Untested"	< 51	U				

NAME OF THE COURSE	MANUAL THERAPY	T .						
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL							
	PROGRAM							
THE FORM OF TRAINING	Full time							
PROFESSION	Doctor							
FACULTY	General Medicine							
COURSE	V SEMESTER XI							
ACADEMIC YEAR	2020-2021							

CREATOR	PhD assistant professor Tigran Petrosyan
PHONE	+374 93 73 45 79
E-MAIL	tigpetrosyan@mail.ru

CHAIR	"Traditional medicine named after E. Minasyan"
CLINICAL BASE	SMTC
HEAD OF CHAIR	PhD Eleonora Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	XI	3	17	3	90	51	20	31	27	12		+
Total		3	17	3	90	51	20	31	27	12		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# **Knowledge**

- the scientific-theoretical justifications of the trick methods of therapeutic effect used in manual therapy, their indications and contraindications, the correct organization of the direction and course of research and medical intervention, as well as deviations and disorders of physical development,
- forms of their correction by means of manual therapy.

# **Abilities**

- to determine the deformations, problems and mobility of different sections of the spine,
- determine the range of mobility of different joints,
- examine the active and passive movements of the motor segments of the spine, chest, shoulder girdle, pelvis and limbs,
- choose and apply the flexion, extension and lateral flexion, mobilization techniques of different parts of the spine,
- choose and apply traction manipulations of the spine, as well as various muscles and joints,

- apply different therapeutic massage techniques according to the problem of the disease,
- to apply the knowledge and skills acquired during the teaching of the subject in the practice of rehabilitation treatment of patients of different nature.

### **Possessions**

- skills: conducting breathing exercises/static, dynamic, athletic breathing and exhalation, localized breathing/, stretching, strength relaxation exercises.
- Manual therapeutic, contact, palpatory, diagnostic and therapeutic targeted and non-targeted techniques.

# 2. BRIEF CONTENT OF THE COURSE

The "Manual Therapy" course examines the basics of kinesiotherapy, manual therapy, therapeutic massage, scoliotic posture and scoliotic disease, the characteristics of kinesiotherapy in different types of scoliosis, specific disorders of spinal function, their theories, consequences of functional disorders of the spine, complications, functional anatomy and radiology of the spine, spine in the frontal plane.

### 3. GOAL OF THE COURSE

The goal of teaching the subject "Manual therapy" is to teach the scientific-theoretical justifications of the therapeutic effect techniques used in manual therapy, their indications and contraindications, the correct organization of the direction and course of research and medical intervention as well as deviations and disorders of physical development and ways of their correction by means of manual therapy.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

### Know

- **K1**. the scientific-theoretical justifications of the trick methods of therapeutic effect used in manual therapy, their indications and contraindications,
- **K2.** correct organization of the direction and course of research and medical intervention, as well as ways of correcting deviations and disorders of physical development by means of manual therapy.

### Be able to

- **A1.** determine the deformations, problems and mobility of different parts of the spine, determine the range of mobility of different joints and examine the active and passive movements of the mobility segments of the spine, chest, shoulder girdle, pelvis and limbs,
- **A2.** choose and apply the flexion, extension and lateral flexion, mobilization techniques of different parts of the spine,
- A3. choose and apply traction manipulations of the spine, as well as various muscles and joints,
- **A4.** apply different techniques of therapeutic massage according to the problem of the disease, apply the knowledge and skills acquired during the teaching of the subject in the practice of rehabilitation treatment of patients of different nature.

### **Possess**

- **P1**. Skills: conducting breathing exercises/static, dynamic, athletic breathing and exhalation, localized breathing/, stretching, strength relaxation exercises.
- **P2.** Manual therapeutic, contact, palpatory, diagnostic and therapeutic targeted and non-targeted techniques.

### 5. LITERATURE

- 1. Chair material.
  - 2. Nikita A. Vizniak. Clinical Chiropractic Textbook. 2020. P. 520
- 3. P. Pfund, Differentiation, Examination and Treatment of Movement Disorders in Manual Therapy; 589p.; 2005.

- 4. D. Kostopoulos; The Manual of Trigger Point and Myofascial Therapy; New York, 236p., 2001.
- 5. Science, Theory and Clinical Application in Orthopaedic Manual Physical Therapy, Editors: J. Rivard and O. Grimsby, Taylorsville, 2008.
- 6. Merzenyuk O.S. Practical guide to manual therapy, Novokuznetsk, 316s., 2005.
- 7. G. Ivanichev, Kazan: Manual therapy. Atlas. Tatar newspaper and magazine publishing house, 1997. 448 p.
- 8. Moshkov "General principles of physiotherapy exercises". 1985 Milyukova I.V., Evdokimova T.A. Therapeutic exercises for diseases of the spine: St. Petersburg "Owl", Moscow "EKSMO", 2004ã.
- 9. Khabirov F.A. Clinical neurology of the spine: Textbook, Kazan, 2002
- 10. Popov S.N. Physical rehabilitation: A textbook for academies and institutes of physical culture, Rostov n / a: "Phoenix", 1999
- 11. Artemenkov A.A. Dynamics of cardiorespiratory pairing during dosed physical activity: Abstract of the thesis. cand. dis. SPb., 2002
- 12. Levitt, Yanda "Manual Medicine", 1993, Moscow.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	SPORTS MEDICINE							
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL PROGRAM						
THE FORM OF TRAINING	Full time	Full time						
PROFESSION	Doctor	Doctor						
FACULTY	General Medicine	General Medicine						
COURSE	V	V SEMESTER X						
ACADEMIC YEAR	2020-2021							

CREATOR	PhD Ara Arshamyan, Lilit Sukiasyan
PHONE	+374 98 90 59 01, +374 91 36 38 16
E-MAIL	Aradoc1983@mail.ru, lilit.sukiasyan@inbox.ru

CHAIR	Therapeutic subjects
CLINICAL BASE	SMTC
HEAD OF CHAIR	PhD Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	X	4	13	5	120	65	24	41	37	18		++
Total		4	13	5	120	65	24	41	37	18		++

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

## **Knowledge**

- 1. Basics of human anatomy, structural-functional features according to gender and age.
- 2. Functional ccharacteristics of organs and systems, and regulation mechanisms in the normal and pathological processes.
- 3. The main metabolic pathways of carbohydrate, lipid, amino acid and protein exchange, their role in the morphofunctional pattern of the cell. Role of cell membrane and signaling systems in metabolism. In the blood serum, the main metabolic products (glucose, urea, uric acid, bilirubin, lactic acid, etc.) values in norm and pathology.
- 4. basics of general pathology: the concept of health and disease, the general theory of disease; etiology and pathogenesis; the role of heredity in pathology; reactivity of the organism; immunological reactivity; typical pathological processes.
- 5. the basics of the sports nutrition and hygiene, the influence of environmental factors on the body's functionality.
- 6. pharmacokinetics, mechanisms of action, side effects and application features of different therapeutic dosage forms.
- 7. features of the occurrence, course and outcome of emergency states of the organism, the basics of their management, treatment and control.

### Abilities:

1. to interpret the results of the most common functional diagnostic testing of the blood, heart, vessels, kidneys, liver and other organs.

- 2. to describe different cellular, tissue and organ-system morpho-functional picture in normal and pathology.
- 3. diagnose injuries of the human musculoskeletal system and diseases of other systems on slides, preparations and different images.

### Possessions:

- 1. to master the skills of histological microscopy, electron micrographs and radiological diagnostic image analysis in the field of sports activities.
- 2. to master first aid skills and follow-up strategies.

### 2. BRIEF CONTENT OF THE COURSE

The "Sports Medicine" educational course examines the issues of maintaining and strengthening the health of people engaged in physical education and sports, prevention of specific pathological conditions characteristic of them, promotion of rational use of physical education and sports means and methods, optimization of post-gravity recovery processes and increase of working capacity, the extension of the period of active life activity.

### 3. GOAL OF THE COURSE

The subject "Sports medicine" studies the course of development of pathological processes and diseases observed in sports activities, the main indicators of athlete's health, as well as the etiology, pathogenesis, principles of clinical manifestations, treatment, prevention and rehabilitation of typical diseases.

# 4. EDUCATIONAL RESULTS. At the end of the course, the student must

#### Know:

- **K1**. the pathogenesis, clinical manifestations, complications of the most common diseases and injuries in sports activity, the modern therapeutic approaches to their treatment, the peculiarities of the course and treatment in different age groups of athletes.
- **K2.** methods of laboratory and instrumental examination of the main clinical manifestations of injuries: theoretical basis of methods, interpretation of results.
- **K3** the main directions and measures for the prevention and treatment of injuries during sports activities, the means of restoring the physical performance of athletes and the forms of organizing medical supervision.
- **K4.** assessment of functional fitness of athletes in various sports types; methods of recording of the basic functional indicators during rest and physical activity.
- **K5.** The main mechanisms of various pathologies occurring in the organism of athletes and adaptation to physical load, with consideration of constitutional, gender, age, individual characteristics and sports specialization:

### Be able to:

- A1. use educational, scientific, popular literature and the Internet service for professional activities.
- **A2.** use the acquired knowledge in medical, organizational and managerial and scientific research fields.
- **A3.** carry out medical supervision among those engaged in physical training and sports activity, as well as carry out functional tests and interpret the results.
- **A4.** provide first aid in case of accidents during sports activity.
- **A5.** implement and organize medical-preventive and rehabilitative measures, taking into account the age-sex, professional sports characteristics of athletes.

### Possess:

- P1. medical skills and methods of medical examination necessary for the activity of a sports doctor.
- **P2.** the assessment and control skills of the athlete's fitness and the main functional systems' condition and in the physical performance.

- P3. the basic medical measures of organizing first aid in life-threatening and urgent situations.
- **P4.** algorithms for clinical diagnosis, referring the victim to the appropriate specialist.
- **P5.** organization of medical support and service during competitions.

### 5. LITERATURE

- 1. Chair material
- Netter's Sports Medicine. Christopher C. Madden, Margot Putukian, Craig C. Young, Eric C. McCarty. 1600 John F. Kennedy Blvd., Philadelphia, PA 19103-2899. NETTER'S SPORTS MEDICINE ISBN: 978-1-4160-4922-7 Copyright © 2010 by Saunders, imprint of Elsevier Inc. ISBN (online): 978-1-4160-5924-0.
- 3. SPORT MEDICINE HANDBOOK, 2011-2012, NCAA. Copyright, 2011, by the National Collegiate Athletic Association. Printed in the USA. P.O. Box 6222 Indianapolis, Indiana 46206-6222, 317/917-6222, NCAA.org. Compiled By: David Klossner, Director of Student-Athlete Affairs. NCAA.org/health-safety.
- 4. Макарова Г.А. Спортивная медицина: Учебник. М.: Советский спорт, 2003. 480 с: ил. ISBN 5-85009-765-1.
- 5. Спортивная медицина Дубровский В.И. Учебник, 2002, 14/08/2012 14:58
- 6. The Anatomy of Sports Injuries, Second Edition: Your Illustrated Guide to Prevention, Diagnosis, and Treatment Paperback Illustrated, September 4, 2018.
- 7. Спортивная медицина: национальное руководство + CD / Под ред. С.П. Миронова, Б.А. Поляева, Г.А. Макаровой, 29 авг. 2016г. Прототип: Электронное издание

#### Additional literature

- 1. Экологическая медицина: Учебное пособие / Бортновский В.Н., Карташева Н.В., Мамчиц Л.П. М.:НИЦ ИНФРА-М, Нов. знание, 2015. 185 с.: . (Высшее образование) (Переплёт 7БЦ) ISBN 978-5-16-010307-5 Режим доступа: http://znanium.com/catalog/product/483209
- 2. Гендер в спортивной деятельности [Электронный ресурс] : Уч. пособ. / А. Л. Ворожбитова. Флинта : Наука, 2010. 216 с. ISBN 978-5-9765-1031-9 (Флинта), ISBN 978-5-02-037342-6 // с http://znanium.com/catalog/product/405985
- 3. Спортивная ориентация и отбор для занятий различными видами спорта: Учебное пособие / Семенова Г.И., 2-е изд., стер. М.:Флинта, 2017. 104 с.: ISBN 978-5-9765-3236-6 // с <a href="http://znanium.com/catalog/product/959296">http://znanium.com/catalog/product/959296</a>
- 4.Ինտերնետ-պաշարներ.

Десмургия/http://www.uhlib.ru/medicina/osnovy\_medicinskih\_znanii\_posobie\_dlja\_sdachi\_yekza mena/p8.php.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+

	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	FAMILY MEDICINE						
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	VI SEMESTER XI						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Ara Arshamyan
PHONE	+374 98 90 59 01
E-MAIL	aradoc1983@mail.ru

CHAIR	Therapeutic subjects
CLINICAL BASE	SMTC
HEAD OF CHAIR	PhD Ara Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XI	4	17	4	120	68	24	44	34	12		
Total		4	17	4	120	68	24	44	34	12	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### **Knowledge**

- 1. Ethics and deontology in medicine, taking into account the characteristics of a sick organism.
- 2. Anatomical, physiological and age-related features of the structure and development of healthy and diseased organisms, the structure, topography and development of cells, tissues, organs and systems, the interaction of their functions in normal and pathological conditions, organchanges and population features at the levels of life formation.
- 3. Physical phenomena and patterns underlying the main processes occurring in the human body. Characteristics of physical factors affecting the human body and biophysical mechanisms of influence
- 4. The main metabolic processes in the body to identify disorders of protein, carbohydrate and fat metabolism, the main biochemical parameters of blood to assess the state of protein, carbohydrate and fat metabolism, knowledge about the participation of various organ systems in metabolism to identify pathologies of the liver, gastrointestinal system, kidneys, cardiovascular system.
- 5. Functional systems of the human body, their regulation and self-inducement under the influence of the external environment in normal and pathological conditions.
- 6. Knowledge of infection and immunity, about the role of infection in the etiology of major

- infectious and infectious-allergic diseases.
- **7.** Morphological changes in diseases of internal organs, various clinical and anatomical variants of diseases, complications of acute and chronic processes of all nosological forms.
- 8. Clinical methods of examination of therapeutic patients. Laboratory and instrumental examination of patients (thermometry, spirometry, measurement of ZC, venous pressure, determination of blood flow velocity, gastric and duodenal probing, examination of sputum, blood, urine, feces, gastric juice examination, ECG). Theoretical understanding of the main laboratory and instrumental studies conducted by specialists (endoscopy, radioisotope examination, ECG, phonocardiography, echocardiography, biopsy data, puncture of the sternum, examination of the function of external respiration), the ability to group the main clinical symptoms in diseases of the respiratory, blood supply, digestive systems, liver, kidneys, blood system, musculoskeletal system and their typical syndromes. Recording of the patient's examination data in the form of a medical history.
- 9. Pharmacokinetics of the main drugs used in the main diseases of internal organs, indications for their use. Side effect of medications.

### **Abilities**

- 1. Palpation of the main bony landmarks on a person, to know the anatomical features of organs and organ systems, the course and outlines of the main neurovascular tracts.
- 2. The ability to use educational, scientific, popular science literature, the Internet for professional activities.
- 3. Analysis of the results of the most common methods of functional diagnostics used to detect pathologies of blood, heart and blood vessels, kidneys, liver and other organs and systems.
- 4. To determine and evaluate the results of ECG, spirography, thermometry, hematological parameters.
- 5. Differentiate the indicators of the level of metabolites in the blood serum (glucose, urea, bilirubin, uric acid, lactic acid, pyruvate acid, etc.) from pathological changes, read the proteinogram and explain the significance of the differences.

### **Possessions**

- 1. Basic methods of patient care and basic nursing manipulations.
- 2. Master clinical and some instrumental methods of examination of therapeutic patients.

### 2. BRIEF CONTENT OF THE COURSE

"The educational course "Family Medicine" studies comprehensive care for a person and family, prevention of diseases, their diagnosis and treatment. It includes a set of knowledge, skills and abilities for the prevention and treatment of diseases of different age groups and genders, used mainly to provide medical care to patients outside the hospital.

### 3. GOAL OF THE COURSE

The goal of the course is to provide in-depth clinical knowledge, skills and abilities in the field of family medicine, on the basis of which it is possible to provide high-quality primary medical care based on the principles of modern medicine.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

### **Know**

- **K1**. Etiology, pathogenesis of the most common diseases, means of prevention, modern classification of diseases.
- **K2.** The clinical manifestations of the most common diseases in different age and sex groups in a typical way, features of the course, possible complications.
- **K3.** Surgical and therapeutic profile patients diagnostic methods, diagnostic possibilities of direct patient examination methods, modern clinical, laboratory, instrumental methods of patient examination (including endoscopic, radiological methods, ultrasound diagnostics).
- **K4**. Clinico-pharmacological characteristics of the main groups of medications and rational choice of specific medications for the main syndromes of diseases and emergency conditions in patients.

#### Be able to

- **A1.** To participate in the organization and provision of medical and preventive care to the population, based on its socio-professional and age structure.
- **A2.** To determine the patient's condition: to collect anamnesis, to conduct a physical examination (inspection, palpation, auscultation, measurement of BP, determination of pulse properties, etc.), to conduct a primary examination of organs and systems: endocrine, immune, respiratory, cardiovascular, hematopoietic, digestive, genitourinary, musculoskeletal and joints.
- **A3**. Assess social factors affecting the physical and mental health of the patient: cultural, ethnic, religious, individual, family, social risk factors (unemployment, violence, illness and death of relatives); make a preliminary diagnosis.
- **A4**. In accordance with the outcome of the disease, make the volume of additional studies to confirm the diagnosis and obtain a reliable result.
- **A5**. Choose the type of personal care for the treatment of the patient: primary care, emergency care, hospitalization.

### **Possess**

- **P1**. General methods of clinical examination.
- **P2**. Analysis of laboratory and instrumental study results.
- P3. Algorithm for making a primary diagnosis.
- **P4**. The main diagnostic and therapeutic measures in the provision of first aid and life-threatening conditions.

#### 5. LITERATURE

- 10. Chair material
- 11. Է. Նազարեթյան, Ա. Գասպարյան, Ներքին հիվանդություններ, Երևան, 2004
- 12. Ռ. Ստամբոլցյան, Լ. Միքայելյանց, Լ. Շուշանյան, Ներքին հիվանդություններ, Ռ. Ստամբոլցյանի ընդհանուր խմբագրությամբ, Երևան, 1988
- 13. Վ. Հարությունյան, Ե. Միքայելյան, Է. Կոտոյան, Ներքին հիվանդություններ, Երևան, 2000
- 14. О.Н. Гирина, Семейная медицина, Киев, 2016
- 15. И.В. Дуда, Руководство по семейной медицине, Москва, 2009
- 16. А. Окороков, дагностика шнутренних болезней, Москва, 2003
- 17. В. Милькаманавич, Атлас клинического исследования, учеб. пособие, Москва, 2006
- 18. Robert E. Rakel, Textbook of Family Medicine, Eighth Edition, Elsvier, 2018
- 19. Robert B. Taylor, Family Medicine, Springer, 2016
- 20. B. Walter and others, Davidson's Principles and Practice of Medicine, 22nd Edition, Amsterdam, 2014
- 21. D. Kasper, A. Fauci and others, Harrison's Principles of Internal Medicine, 19th Edition, New

York, 2015

- 22. Harrison's Principles of Internal Medicine 19th Edition: Kasper, Fauci, Hauser, Longo, Jameson, Loscalza
- 23. 100 cases in Clinical Medicine Second Edition: P. J

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	IMMUNOLOGY AND	IMMUNOLOGY AND ALLERGOLOGY						
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND I	CONTINUOUS AND INTEGRATED EDUCATIONAL						
THE FORM OF TRAINING	Full time	Full time						
PROFESSION	Doctor	Doctor						
FACULTY	General Medicine	General Medicine						
COURSE	VI	VI Semester XII						
ACADEMIC YEAR	2020-2021							

CREATOR	PhD Anna Sargsyan
PHONE	+374 94 91 12 09
E-MAIL	anna.v.mnatsakanyan@gmail.com

CHAIR	Social Medicine
CLINICAL BASE	-
HEAD OF CHAIR	Ph.D. Anna Ovchyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XII	2	17	2	60	34	16	18	17	9		+
Total		2	17	2	60	34	16	18	17	9		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum

### **Knowledge**

- 1. Basic Latin Medical Terminology.
- 2. General and specific structural and functional properties of tissues and cells in the body.
- 3. Cellular, tissue, organ, organ-system, and whole-organism structural levels of living organisms
- 4. Mechanisms of work of organs and systems of the organism, their regulation, the influence of external environmental factors; normal homeostasis.

#### Abilities:

- 1. explain the nature of developmental deviation with its possible consequences, assessment of individual factors that characterize the health status of different groups of the population, depending on lifestyle.
- 2. use several hundred terminology units and elements.
- 3. methodology of preparation of preparations for microscopic examination and tissue differentiation during examination.
- 4. to work with biological literature, to study the methodology of microscopic study of biological objects, Read prescriptions, clinical and pharmacological terminology in Latin.
- 5. explain the structure, structure and functions of human organ systems.
- 6. assessment of the function of human organs and systems, conducting clinical trials.

### Possessions:

1. application of knowledge gained in practical activities

#### 2. BRIEF CONTENT OF THE COURSE

"Immunology and Allergology" course studies the body's defense levels, immunity and its mechanisms, lymphocytes and its types, types of immunity, immune reaction mechanisms, process, regulation, antigen-antibody interaction, immunoglobulins and their types, immune tolerance, immunogram analysis, allergy, types, vaccination.

#### 3. GOAL OF THE COURSE

The goal of the "Immunology-Allergology" course is to prepare students for independent clinical diagnosis of symptoms based on their knowledge of general immunology.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1. The structure and functions of the immune system.
- K2. Mechanisms of symptoms of the immune system in various diseases, clinical course, main methods of diagnosis.
- K3. Drugs that affect the immune system
- K4. Types of immunity, immunological characteristics of common diseases

### Be Able to

- A1. diagnose and distinguish types of immune diseases
- A2. interpret the results of immunological tests.

#### 5. LITERATURE

- 1. Chair material
- 2. Иммунология: учебная литература для студентов мед. вузов / Р.М.Хаитов и др.. М., 2000
- 3. Клиническая иммунология и аллергология: учебное пособие для студентов мед. вузов / под ред. A.B.Караулова – М., 2002.
- 4. Наглядная иммунология/ Бурместер Г.-Р., Пецутто А., под редакцией Л.В. Козлова М., 2009.
- 5. Essential Clinical Immunology / Edited by J.B. Zabriskie Cambridge University Press, 2009.
- 6. Immunology at a Glance / J.H.L. Playfair, B.M. Chain London, 2004.
- 7. Иммунология; практикум: учебное пособие/ под редакцией Л.В. Ковальчука, Г.А. Игнатьевой, Л.В. Ганковской М., 2010.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	PEDIATRICS							
TYPE OF COURSE	Mandatory	Mandatory						
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL						
	PROGRAM	PROGRAM						
THE FORM OF TRAINING	Full time	Full time						
PROFESSION	Doctor	Doctor						
FACULTY	General Medicine	General Medicine						
COURSE	V, VI SEMESTER X, XI							
ACADEMIC YEAR	2020-2021							

CREATOR	PhD associate professor, Sahakanush Arustamyan
	Hasmik Gevorgyan
PHONE	+374 93 25 30 04, +374 91 65 51 55
E-MAIL	hasmik.gevorkian@gmail.com

CHAIR	Therapeutic subjects
CLINICAL BASE	-
HEAD OF CHAIR	PhD A. Arshamyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
V	X	4	13	5	120	65	36	29	37	18		+
VI	XI	5	17	5	150	85	36	49	47	12	6	
Total		9	30	10	270	150	72	78	84	30	6	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# **Knowledge**

- 1. ethics and deontology, features of child psychology in terms of the child's age.
- 2. anatomical features of the organism, organs and organ-systems in children.
- 3. embryogenesis of organism, organs, organ-systems and tissues.
- 4. functional characteristics of the organism, organs and organ-systems in different age groups.
- 5. general patterns of life activity of all classes of microorganisms and their role in human life and health. The main characteristics and mechanisms of influence of the changing factors in the child's organism.
- 6. types of genetic diseases, etiology.
- 7. types of parasitic diseases, etiology.
- 8. health groups in childhood, rational nutrition and daily routine in different periods of childhood, indicators of children's physical development, physical education and tempering of children, formation of hygienic standards of children's healthy lifestyle, ensuring sanitary and hygienic conditions of children's external environment in children's groups.
- 9. the basics of biochemical processes in healthy children and during various pathological processes.

- 10. issues of disease development, functional features of the child's body during various pathological conditions.
- 11. morphological changes in childhood diseases.
- 12. the main drugs used in childhood, their therapeutic and side effects.
- 13. Basic principles of asepsis and antiseptics, hemotransphysiology, surgical diseases in children.
- 14. types of infectious diseases, etiology, pathogenesis, clinical course, complications, diagnosis, modern methods of treatment, anti-epidemiological actions.
- 15. tuberculosis in childhood and adolescence: features of pathogenesis, clinic, diagnosis and treatment.
- 16. Features and principles of correction of immune responses of the child's organism.
- 17. providing emergency aid in life-threatening situations.
- 18. radiodiagnostic features.

### **Abilities**

- 1. determine and evaluate the results of electrocardiography, spirometry and thermometry, hematological indicators.
- 2. to carry out physical examinations of an alive person (palpation, percussion, auscultation).

#### **Possessions**

1. Collecting the patient's anamnesis.

### 2. BRIEF CONTENT OF THE COURSE

The <u>"Pediatrics"</u> course includes and substantiates knowledge and abilities regarding all periods of childhood (prenatal, intranatal, postnatal), highlights their differences, forms a mindset regarding the assessment and correction of the health, physical development and pathological processes of children of different ages.

### 3. GOAL OF THE COURSE

The goal of the course is to provide students with the knowledge of the characteristics of newborn age, the ability to distinguish between mature and immature newborns, the viability of the newborn, the assessment of borderline states, the ability to identify the most common diseases of newborn age, assess the severity and organize treatment, and organize the diagnosis, differentiation and prevention of the most common diseases of older children. , as well as the ability to assess the immediate conditions of children and organize help.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course, the student should

### **Know**

- K1. Periods of childhood, characteristics of children's physical and/or neuropsychological development, collection of morphometric data, importance of environmental and hereditary factors affecting children's physical development, developmental deviations.
- K2. The modern aspects of etiopathogenesis, characteristics, classifications, pathogenesis and features of the clinical course of the main pediatric diseases. Their modern methods of diagnosis and treatment.
- K3. Approaches to rational child nutrition in accordance with modern concepts.
- K4. Organization of treatment of a sick child in outpatient and inpatient conditions.

### Be able to

- A1. Communicate with a healthy and sick child, his parents, keeping the norms and principles of deontology.
- A2. Make a plan for laboratory and instrumental examinations of the patient

- A3. Prescribe appropriate treatment, provide necessary emergency assistance.
- A4. Form the diet of children on various forms of nutrition
- A5. Implement disease prevention and plan for further recovery.
- A6. Evaluate the physical and/or neuropsychological development of children in different age groups.
- A7. Make a plan of prophylactic measures and dispensary control with the aim of preventing the formation of the relevant pathology at an older age.

### **Possess**

- P1. Collecting and evaluating a child's life and medical history collection.
- P2. Performing physical examinations of the child.
- P3. Perform morphometric measurements of children and evaluate the obtained results in accordance with age norms.

### 5. LITERATURE

- 1. Chair material
- 2. Ս. Բաբլոյանի խմբագր., «Մանկաբուժություն», Երևան, 2010թ.
- 3. Վ.Ա Աստվածատրյան, «Կլինիկական մանկաբուժություն», Երևան, 1987թ.
- 4. Վ.Ա Աստվածատրյան, «Մանկական հիվանդություններ», Երևան, 1975թ.
- 5. Исаева Л.А., "Детские болезни", Москва, 2002г.
- 6. Berkowitz's Pediatrics: A Primary Care Approach, 4th Edition, Editor: Diane Lundquist, 2000, American academy of pediatrics, 997 p.
- 7. U. Robert M. Kliegman, "Nelsen Textbook of Pediatrics", 20 editions, Elsevier, 2016, 5315 p.

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Assessment Point	Assessment letter
96-100	A+
90-95	A
80-89	B+
70-79	В
60-69	C+
51-59	C
50 and below	D
≥51	S
< 51	U
	96-100 90-95 80-89 70-79 60-69 51-59 50 and below ≥51

NAME OF THE COURSE	OBSTETRICS AND GYNECOLOGY						
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM						
THE FORM OF TRAINING	Full time						
PROFESSION	Doctor						
FACULTY	General Medicine						
COURSE	IV-VI SEMESTER VII-XII						
ACADEMIC YEAR	2020-2021						

CREATOR	PhD Rusudan Vardanyan
	Anna Khachatryan
PHONE	+374 93 51 95 29, +374 95 111 717
E-MAIL	rusikovardanyan@yahoo.com, 11khannas11@gmail.com

CHAIR	Surgical subjects
CLINICAL BASE	"Shengavit" MC
HEAD OF CHAIR	MD, Prof. A. Minasyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class. hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
IV	VII	4	17	4	120	68	24	44	34	12	6	
l IV	VIII	3	13	4	90	52	22	30	20	18		++
v	IX	3	17	3	90	51	14	37	21	12	6	
<b>'</b>	X	2	13	3	60	39	14	25	3	12	6	
VI	XI	3	17	3	90	51	18	33	27	12		++
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	XII	2	17	3	60	51	18	33	3	6	S.E.	
Total		17	94	20	510	312	110	202	108	72	18	

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

# Knowledge:

- 1. Features of patient psychology.
- 2. With levels of human organs, organ-systems and organisms.
- 3. Disorders of the normal structure of human organs and tissues in a diseased state:
- 4. Organizational-physiolog, sex-age-individual Features of the structure and development of a healthy and diseased organism.
- 5. Relationship of organs and tissues in separate topographic regions, which allows to get an idea of the pathogenesis, development and distribution of pathological processes

- 6. General principles of surgery, including the study of operative access and methods
- 7. Basic principles of diagnosis, treatment and anesthesia in surgery.
- 8. Etiology, pathogenesis, clinicand diagnostic features of surgical diseases of the breast and abdomen, the most complete method of treatment.
- 9. Physiological features of pathological, morbid conditions of the organism; Functional changes in organ systems during major diseases of internal organs
- 10. Etiology, pathogenesis, clinic, diagnostic features of internal diseases, the most complete method of treatment

### Abilities:

- 1. Perform human's physical examinations such as palpation, percussion, auscultation.
- 2. Qualify the results of electrocardiography, respiration and thermometry, hematological indicators.
- 3. Make a surgical connection, use the surgical instruments correctly, disconnect the users and connect, stop the bleeding during that time.
- 4. Keep the rules of antiseptic's and aseptic
- 5. Stop the bleeding with temporarily and final methods
- 6. Determine blood grouping with standard serums and standard erythrocytes;
- 7. Perform blood conservation and maintenance;
- 8. Ensure limb immobilization;
- 9. Use some methods of local anesthesia;
- 10. Install types of bandages

### 2. BRIEF CONTENT OF THE COURSE

The subject "Obstetrics & Gynecology» is the course studies the physiology and pathologies of the female reproductive system, the condition and functioning of the female genital organs in normal and pathological conditions, the biological functions of women, including childbirth. The course includes the following departments: physiological and pathological obstetrics, conservative and surgical gynecology.:

### 3. GOAL OF THE COURSE

The goal of the course is:

- to teach students the physiological features of the female body, the main types of gynecological and obstetric pathology, etiopathogenesis, clinic, symptoms, the basics of diagnosis, treatment and prevention; methods of obstetric care.
- the application of acquired knowledge in future medical practice, for diagnosing pregnancy, determining the delivery tactics of physiological and complicated pregnancies, providing emergency care in a number of pathological conditions, preventing postpartum and postoperative complications, diagnosing, treating and preventing major gynecological pathologies.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- **K1.** Issues of obstetrics and gynecology deontology, features of the organization of medical care for pregnant women, women in labor and childbirth, outpatient and inpatient conditions, the sanitary-epidemic regime of obstetrics and gynecology departments of hospitals.
- **K2.** Biological periods of a woman's life. Fertilization. Diagnosis of pregnancy. Development of fetal membranes. Physiological changes in a woman's body during pregnancy. Stages of fetal development.
- **K3.** Management of normal labor. Biomechanism of delivery with different presentations of fetus.

Normal postpartum period.

- **K4.** Newborns development, their diseases and pathological cases
- **K5.** Diagnosis of pathology in pregnancy, delivery and postpartum periods; prevention and treatment; Indications and contraindications of pregnancy protection, prolongation of pregnancy, premature labor and abortions; management of pathological deliveries
- K6. Etiology, pathogenesis, types, classifications, clinic of gynecological diseases
- **K7.** diagnostic features of gynecological diseases
- **K8.** The most complete methods of treatment of gynecological diseases
- **K9.** Anatomo-physiological features of female reproductive organs.
- **K10.** Basic principles of family planning.

### Be able to:

- **A1.** logically justify diagnoses, complications of pregnancy and childbirth, perform differential diagnostics
- A2. timely refer pregnant women, laborers and newborns to the appropriate specialist
- A3. Make a plan for laboratory and instrumental examinations of a gynecological patient
- A4. Collect anamnesis data, conduct a general clinical examination of gynecological patients.

#### Possess:

**P1.** methods for detecting pregnancy, birth dates and fetal weight and fetal heart rate, external obstetric examination, assessment of the condition of the cervix for measuring pelvic dimensions and uterine floor height:

### 5. LITERATURE

- 1. Chair material
- 2. D.C Dutta" Text Book of Obstetrics" Sixth Edition-2004
- 3. В.Е. Радзинский, А.М Фукс " учебник по Акушерстве"

6. ASSESSMENT COMPONENTS	POINT
Attendances	16
Assessment of knowledge acquisition, abilities and skills	70
Independent individual work	14

Mark	Mark's point	Assessment's letter mark
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	SECTIONAL COURS	SECTIONAL COURSE					
TYPE OF COURSE	Mandatory	Mandatory					
EDUCATIONAL LEVEL	CONTINUOUS AND	CONTINUOUS AND INTEGRATED EDUCATIONAL					
	PROGRAM	PROGRAM					
THE FORM OF TRAINING	Full-time	Full-time					
PROFESSION	General Medicine	General Medicine					
FACULTY	General Medicine	General Medicine					
COURSE	VI	VI SEMESTER XI					
ACADEMIC YEAR	2020-2021	2020-2021					

CREATOR	DMed Sc Asadur Namagerdi						
	Hasmik Zakaryan						
	Hasmik Barseghyan						
	Anna Khachpanyan						
PHONE	+374 99 84 74 67, +374, 93 47 07 16, +374 77 36 07 72, +374 91 19						
	13 94						
E-MAIL	asadoor.amirkhanian6@gmail.com,						
	hzakarian.73@mail.ru,						
	Hasmikbarseghyan220@gmail.com,						
	khachpanyan85@gmail.com						

CHAIR	Medical – Biological subjects
CLINICAL BASE	"Surb Grigor Lusavorich" Medical Center
HEAD OF CHAIR	PhD Naira Hunanyan

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XI	1	17	1	30	17	4	13	8	5		+
Total		1	17	1	30	17	4	13	8	5		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- at the levels of human organs, organ-systems and organism,
- structural features of cells, tissues and organs, their study methods,
- anatomical-physiological, sexual-age and individual characteristics of the structure and development of a healthy and sick organism,
- disorders of the normal structure of human organs and tissues in a diseased state,
- the relationships of organs and tissues in separate topographical regions, which gives an opportunity to understand the ways of the emergence, development and spread of pathological processes,
- the general principles of operations, which include the study of operative inputs and methods,
- basic principles of diagnosis, treatment and anesthesia in surgery,
- physiological features of pathological, disease states of the organism, functional changes of organ

- systems during the main diseases of internal organs,
- the etiology, pathogenesis, clinic, diagnostic features and the most complete method of treatment of internal diseases,
- the etiology, pathogenesis, clinic, diagnostic features and the most complete method of treatment of injuries and orthopedic diseases.

#### Abilities:

- discovery of cadaver tissues and organs,
- give an assessment of the histophysiological state of the cells, tissues and organs of the human body,
- determine and evaluate the results of electrocardiography, spirometry and thermometry, hematological indicators,
- perform surgical suturing and ligation, use surgical tools correctly, disconnect and connect tissues, stop bleeding in the meantime,
- determine blood group affiliation with standard sera and standard erythrocytes,
- perform blood conservation and preservation.

### Possessions:

• skills in working with magnifying equipment.

### 2. BRIEF CONTENT OF THE COURSE

The course examines the pathology service, problems and methods, analysis of biopsies and surgical material, pathology documentation, autopsy, sudden death.

# 3. GOAL OF THE COURSE

### 3.1. The goal of the course:

The main goal of the course is to acquaint students with pathologic autopsy techniques, which is one of the most important functions of hospital pathologic anatomy.

# 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

#### Know:

- K1. the problems, logic, structure of the patho-anatomical service,
- K2. patho-anatomical diagnosis methods, features,
- K3. visually evaluate the changes in the tissues and organs of the corpse,
- K4. determine the category of clinical and patho-anatomical diagnoses and the causes of inconsistencies,
- K5. features of the formulation of patho-anatomical documents,
- K6. the technique of taking biopsy material, the formulation of a referral for the appropriate histological examination.

#### Be able to:

A1. analyze autopsy data.

### 5. LITERATURE

- 1. Chair Material
- 2. Струков А. И. Патологическая анатомия [Текст] : учеб. / А. И. Струков, В. В. Серов. 5-е изд., стер. Москва : Литтерра, 2010. 846 с
- 3. Пальцев М. А. Атлас по патологической анатомии [Текст] : учеб. для студентов мед. вузов/ М.А. Пальцев, А.Б. Пономарев, А.В. Берестова. -2-е изд., стер. -Москва: Медицина, 2005. -422 с.: ил., [5] л. цв. ил

- 4. Robbins Pathologic Basis of Disease / Eds. R.S.Cotran, V.Kumar, T.Collivs Philadelphia, London, Toronto, Montreal, Sydney, Tokyo: W.B.Saunders Co., 1998 (6th Ed.).
- 5. «Պաթոլոգիական անատոմիա», հեղինակ-խմբագիր՝ պրոֆ. Ն.Դ. Վարդազարյան, Երևան, 2006

6. ASSESSMENT COMPONENTS	POINT		
Attendance	16		
Assessment of knowledge acquisition, abilities and skills	70		
Independent individual work			

Mark	Assessment Point	Assessment letter
"Excellent"	96-100	A+
	90-95	A
"Good"	80-89	B+
	70-79	В
"Satisfactory"	60-69	C+
	51-59	С
"Unsatisfactory"	50 and below	D
"Tested"	≥51	S
"Untested"	< 51	U

NAME OF THE COURSE	FORENSIC MEDICINE			
TYPE OF COURSE	Mandatory			
EDUCATIONAL LEVEL	CONTINUOUS AND INTEGRATED EDUCATIONAL			
	PROGRAM			
THE FORM OF TRAINING	Full-time			
PROFESSION	Doctor			
FACULTY	General Medicine			
COURSE	VI	SEMESTER	XII	
ACADEMIC YEAR	2020-2021			

CREATOR	DMed Sc Asadur Namagerdi			
	Hasmik Zakaryan			
	Hasmik Barseghyan			
	Anna Khachpanyan			
PHONE	+374 99 84 74 67, +374, 93 47 07 16, +374 77 36 07 72, +374 91 19			
	13 94			
E-MAIL	asadoor.amirkhanian6@gmail.com,			
	hzakarian.73@mail.ru,			
	Hasmikbarseghyan220@gmail.com,			
	khachpanyan85@gmail.com			

CHAIR	Medical – Biological subjects			
CLINICAL BASE	"Surb Grigor Lusavorich" Medical Center			
HEAD OF CHAIR	PhD Naira Hunanyan			

Year	Semester	Credit	Academic week	Weekly hour	Total hour	Total class hour	Lecture hour	Pract. Lab. hour	Individual work hour	Lecturers' consultation	Examination	Test
VI	XII	4	17	4	120	68	24	44	34	18		+
Total		4	17	4	120	68	24	44	34	18		

1. PRECONDITION. As a basis for mastering the course, you need the following knowledge, skills and abilities, which have been developed through the school curriculum:

### Knowledge:

- 1. At the levels of organs, organ-systems and organism,
- 2. About disorders of the normal structure of human organs and tissues in a diseased state,
- 3. The anatomical-physiological, sex-age and individual characteristics of the structure and development of a healthy and sick organism,
- 4. The relationships of organs and tissues in separate topographical regions, which provides an opportunity to gain insight into the ways of the emergence, development and spread of pathological processes,
- 5. General principles of operations, which include the study of operative inputs and methods,
- 6. Basic principles of diagnosis, treatment and anesthesia in surgery,
- 7. Etiology, pathogenesis, clinic, diagnostic features and the most complete method of treatment

- of surgical diseases of the chest and abdomen,
- 8. Physiological features of pathological, morbid conditions of the organism; functional changes of organ systems during the main disease of internal organs,
- 9. The etiology, pathogenesis, clinical, diagnostic features and the most complete method of treatment of internal disease,
- 10. The etiology, pathogenesis, clinical, diagnostic features and the most complete method of treatment of injuries and orthopedic disease,
- 11. Features of the organization of medical care for pregnant women, women in labor, women in birth, as well as a number of gynecological patients in outpatient and inpatient conditions.

### Abilities:

- 1. Perform physical examination of a living person, such as palpation, percussion, auscultation,
- 2. Discovery of cadaver tissues and organs of the patient,
- 3. Determine and evaluate the results of electrocardiography, spirometry and thermometry, hematological indicators,
- 4. Perform surgical suturing and ligation, correctly use surgical instruments, perform tissue separation and connection, while stopping bleeding,
- 5. Application of aseptic and antiseptic rules,
- 6. Stop bleeding with temporary and final methods,
- 7. Determination of blood groups with standard serum and standard erythrocytes,
- 8. Performance and maintenance of blood conservation,
- 9. Providing immobilization of limbs,
- 10. Use of some methods of local anesthesia,
- 11. Placement of types of bandages,
- 12. Organization of purely surgical examinations and treatments of thoracic and abdominal surgical patients,
- 13. Organization of purely therapeutic research and treatment of patients,
- 14. Organization of examinations and treatments of patients.

### 2. BRIEF CONTENT OF THE COURSE

The course examines the subject of forensic medicine and the objects of its study, the basics of the organization of forensic medicine, forensic death, forensic examination of corpses (of different ages and sexes), forensic traumatology, its types, forensic examination, forensic general and private toxicology, victims, suspects and accused (living persons), forensic medical examination of physical evidence, mistakes of professional activities of medical workers.

### 3. GOAL OF THE COURSE

To teach the main sections of forensic medical examination, the knowledge of which will be used in solving various questions of a medical nature that arise in practical work. It will also help students acquire the medical ethics skills necessary to avoid conflicts with criminal and civil law in the future.

### 4. EDUCATIONAL FINAL RESULTS. At the end of the course the student should:

### Know:

- K1. Methods of judicial and forensic research, wording of conclusions and documents.
- K2. Medical ethics.
- K3. Peculiarities of forensic examination of corpses of fetuses and infants.
- K4. Liability of medical workers in case of professional offenses.
- K5. Cases of exhumation.

### Be able to:

- A1. Conduct an inspection of the scene.
- A2. Perform forensic medical examination of living persons and corpses:
  - a. Determining the age of death,
  - b. Possible causes of death,
  - c. Presence of signs of violence,
  - d. Autopsy technique.
- A3. Perform diagnosis of autopsy material.

### 5. LITERATURE

- 1. Chair material
- 2. Շ.Ա.Վարդանյան, «Դատական բժշկություն»։ Ուս. ձեռնարկ, Երևան, 2010, 304 էջ։
- 3. Շ.Ա.Վարդանյան, «Դատական բժշկություն», Երևան, 1995 թ.
- 4. Ն.Մ. Ավագյան, Կ.Լ. Նազարեթյան, Ա.Ս.Թորոսյան, «Դատական բժշկության դասընթաց», Երևան, 1978 թ.
- 5. Судебная медицина в схемах и рисунках; Г. А. Пашинян, П. О. Ромодановский; М, ГЭОТАР-Медиа, 2010.
- 6. Sh. Vardanyan, K. Avagyan, S. Hakobyan. "Forensic Medicine". Handout for foreign students. Yerevan, 2007, 119p.
- 7. Textbook of Forensic Medicine and Toxicology; Krishan Vij; 5d Edition, ELSEVIER, 2011, 593p.
- 8. Simpson's Forensic Medicine; 13rd Edition, 2011 Hodder & Stoughton Ltd; 253p.

6. ASSESSMENT COMPONENTS				
Attendance	16			
Assessment of knowledge acquisition, abilities and skills				
Independent individual work				

Mark	Assessment Point	Assessment letter		
"Excellent"	96-100	A+		
	90-95	A		
"Good"	80-89	B+		
	70-79	В		
"Satisfactory"	60-69	C+		
	51-59	С		
"Unsatisfactory"	50 and below	D		
"Tested"	≥51	S		
"Untested"	< 51	U		