

International Institute of Medical Education and Cooperation  
**SPECIALIST DEGREE PROGRAMME 31.05.05**  
**‘GENERAL MEDICINE’**  
**COURS (MODULE) ‘Hospital Therapy’**  
**OVERVIEW**

Mode of study	full time
Faculty	International Institute of Medical Education and Cooperation
Department	Hospital Therapy and Endocrinology
Year	5, 6
Semester	9, 10, 11, 12 – Hospital Therapy (396 ac. h.) *ac. h. – academic hours
Lectures	44 ac. h.
Exam	12 semester 9 ac. h.

Practical classes	144 ac. h.
Self-study	199 ac. h.
Total workload	396 ac. h. (11 credits)

The course (module) is devised according to FSES HE requirements approved on February, 9, 2016 by Order of Ministry of Health, Russian Federation) and vocational functions of General Practitioner (primary care physician, district doctor) Professional Standard.

## 1. THE COURSE AIM AND SCOPE

- **The aim** of the mastering of the hospital therapy academic discipline are: - to give the knowledge of the ethiology and pathogenesis, clinical manifestation of the main internal organs' diseases; to reinforce and improve the skills of patient examination in internal medicine; to form the clinical thinking (the skills to make a complete medical diagnosis based on acquired patient information), to teach how to use the differential diagnostic technique in the studied nosological entities; to teach the major principles of prevention and treatment of the internal organ diseases (to prepare for the internship after 5th year). During their 6th year the students continue learning professional medical skills of examining the patients, making the diagnosis and differential diagnosis thinking, personalised treatment plan, medical documentation, learning the emergency medicine methods, patients rehabilitation and observation in internal medicine, and also medical disability expert commission.

### **The course focuses on:**

- Acquiring and reinforcing the skills of writing a patient chart, analysis and synthesis of data obtained during patient's history taking and physical examination, as well as the instrumental and laboratory results.
- Mastering the clinical thinking at a patient bedside using the results of contemporary medical examination, creating the individual approach to a patient diagnostic and treatment plan, as well as observation, rehabilitation, disability expertise and interaction with the patients and their relatives (medical deontology questions).
- Mastering the skills of writing a patient chart, making the diagnosis and prescribing individual treatment plan to the patients with the diseases of the heart, blood vessels, connective tissue (cardiology, rheumatology), lungs (pulmonology), gastro-intestinal tract, liver and pancreas (gastroenterology), kidneys (nephrology) and the blood (hematology).

## 2. THE COURSE POSITION IN SPECIALIST DEGREE PROGRAMME 31.05.01 ‘GENERAL MEDICINE’

The course ‘Infectious diseases’ is taught in the block of professional subjects of ‘General Medicine’

*The background knowledge for the course has been taught in \at*

- Basic subjects: Bioethics; History of Medicine; Latin language; Psychology and Pedagogy; Medical Informatics; Biochemistry; Anatomy; Pathological Anatomy, Clinical Pathological Anatomy;

Histology, Embryology, Cytology; Normal Physiology; Pharmacology; Pathophysiology, Clinical Pathophysiology; Health Economics; Dermatovenereology; Neurology, Medical Genetics; Otorhinolaryngology; Ophthalmology; Life safety; Disaster medicine; Propaedeutics of Internal Diseases; faculty therapy, Hospital therapy.

- Variable subjects: Microbiology, Immunology, Bacteriology, Virology, Endocrinology

### **3. OUTCOME COMPETENCIES OF THE COURSE**

On completing the course a student is expected to:

**1. To know:** The main types of medicines used in the internal medicine treatment;

The order and the standards of the medical care in internal medicine;

The particular qualities of functional system regulation and at the pathological processes;

The methods of laboratory and instrumental diagnostic techniques used for the health evaluation, the major indications for the investigation and the data interpretation

The causes, mechanisms of development and clinical manifestations of the general pathological processes at the base of different internal organs diseases

The ethiology, pathogenesis and pathology, clinical presentation, differential diagnosis, course of the disease, complications and the outcomes of the most common internal organ diseases

The method of obtaining patient complaints and history from the patients themselves, their relatives, legal representatives, and the people nearby

The method of the patient physical examination

The clinical signs of the abrupt blood circulation and/or respiration cessation

International statistical classification of diseases and related health problems

The order and the standards of medical care in internal medicine

The contemporary methods of diseases and patient conditions medical treatment according to the current orders of the medical care standards and delivery

The mechanism of action of the pharmaceutical drugs, medical indications and contraindications to their administration; the side effects of the drugs administration

The contemporary methods of non-pharmaceutical treatment options in the patients with the major diseases and clinical conditions according to the current orders of the medical care standards and delivery

The laboratory and instrumental diagnostic techniques used for the health evaluation, the major indications to the administration of the investigation and the data interpretation

The technique of obtaining patient complaints and history from the patients themselves, their relatives, legal representatives, and the people nearby

The method of the patient physical examination

The clinical signs of the abrupt blood circulation and/or respiration cessation

The technique of basic cardio-pulmonary resuscitation

The mechanisms of action of the automated external defibrillator

The external defibrillation technique in case of the abrupt cessation of the cardiac or pulmonary functions

**2. To be able to:** To prescribe the appropriate medical therapy according to the diagnosis

To obtain the patient history and to analyse the information obtained from the patients (their relatives, legal representatives, and the people nearby) with the diseases and/or conditions, including those that require immediate medical intervention and emergency medicine care

To perform patient physical examination and interpret the data

To interpret the data of the initial/repeated patient examination

To justify the necessity and the amount of laboratory investigation

To justify the necessity and the amount of instrumental diagnostic examination

To justify the necessity of specialty doctor referral

To analyse the obtained examination results, to justify and plan the amount of additional tests, if necessary

To interpret the results of collecting the information about the disease

To interpret the results obtained from the patient laboratory examination

To interpret the results obtained from the patient instrumental diagnostic examination

To interpret the patient data obtained from the specialty doctors consultations

To perform a differential diagnostic of the diseases in the internal medicine clinic

To constitute a treatment plan of the diseases and conditions considering the patient' age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical help standards

To prescribe the medical treatment by the pharmaceutical drugs for the medical use taking into consideration the list of the vital and the most important pharmaceutical drugs and the programs of additional medicine supply, and also considering the patient' age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards

To identify the clinical signs of the sudden cardiac and pulmonary arrest

To determine the emergency and the order of amount, content and sequence of the diagnostic measures

To identify the indications for emergency medicine team response, including specialised

**3. To provide:** Of the methods to prescribe the necessary medical therapy as well as drug combinations.

Obtaining the information (patient complaints, history, medical data interpretation) from the patients (their relatives, legal representatives, and the people nearby) with the diseases and/or conditions requiring emergent or urgent medical care

The initial patient examination. The repeated patient examination

Ordering the patients laboratory tests on indications and in accordance to the current order of medical care delivery and medical care standards

Ordering the patients instrumental examination on indications and in accordance to the current order of medical care delivery and medical care standards

Referring the patients to the specialty physicians on indications and in accordance to the current order of medical care delivery and medical care standards

Development a plan and treatment of the diseases and conditions considering the patient' age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards

Prescribing medical treatment by the pharmaceutical drugs for the medical use taking into consideration the list of the vital and the most important pharmaceutical drugs and the programs of additional medicine supply, and also considering the patient' age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards

Evaluation of the patient condition requiring emergent or urgent medical care

Identification of the sudden cardiac and/or pulmonary arrest

Delivering immediate emergent medical help in case of the sudden cardiac and/or pulmonary arrest

As a result of mastering the discipline the student has to demonstrate the following education results:

Learning outcomes	Competency developed: a description of (compulsory) threshold level	Competency code
1	2	3
<p><b>A student knows:</b>The main types of the therapeutic drugs implemented in the internal medicine therapy</p> <p><b>A student is able to:</b>To administer the appropriate medical therapy according to the diagnosis</p> <p><b>A students uses:</b>The methods of administration of the appropriate medical therapy as well as therapeutic drug combinations</p>	General professional competencies (GPC) readiness for medical use of drugs and other substances and their combinations insolving professional problems	GPC-8

<p><b>A student knows:</b></p> <p>The order of administration and the standards of the medical care in internal medicine</p> <p>The features of the functional systems regulation and also in pathological processes</p> <p>The methods of laboratory and instrumental diagnostic tests for the general health evaluation, the main indications for the investigations and the data interpretation</p> <p>The causes, mechanisms of development and manifestations of the typical pathological processes lying at the basis of the different internal organs diseases</p> <p>The ethiology, pathogenesis and pathology, clinical presentation, differential diagnosis, the features of the course, complications, and the outcomes of the most widespread internal organ diseases</p> <p>The method of obtaining patient's complaints and history from the patients, their relatives, legal representatives, and the people nearby</p> <p>The method of the patient physical examination</p> <p>The clinical signs of the sudden cardiac and/or pulmonary arrest</p> <p>The international statistical classification of diseases and health associated problems.</p> <p><b>A student is able to:</b></p> <p>To obtain the patient history and to analyse the information obtained from the patients (their relatives, legal representatives, and the people nearby) with the diseases and/or conditions, including those that require immediate medical intervention and emergency medicine help</p> <p>To perform patient physical examination and interpret the data, patient examination</p> <p>To justify the necessity and the amount of laboratory investigation, instrumental diagnostic examination</p> <p>To justify the necessity of specialty doctor referral</p> <p>To analyse the obtained examination results, to justify and plan the amount of additional tests, if necessary</p> <p>To interpret the results of collecting the information about the disease, the patient laboratory examination</p> <p>To interpret the results obtained from the patient instrumental diagnostic examination, specialty doctors consultations</p> <p>To perform a differential diagnostic of the diseases in the internal medicine clinic</p> <p><b>A students uses:</b></p> <p>Obtaining the information (patient complaints, history, medical data interpretation) from the patients (their relatives, legal representatives, and the people nearby) with the diseases and/or conditions requiring emergent or urgent medical care</p> <p>The initial patient examination</p> <p>The repeated patient examination. Ordering the patients laboratory tests on indications and in accordance to the current order of medical care delivery and medical care standards</p>	<p>Professional competencies (PC)</p> <p>ability to determine in a patient the main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International Statistical Classification of Diseases and Health Problems, X revision.</p>	<p>PC-6</p>
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<p><b>A student knows:</b></p> <p>The order and the standards of medical care in internal medicine</p> <p>The contemporary methods of diseases and patient conditions medical treatment according to the current orders of the medical care standards and delivery</p> <p>The mechanism of action of the pharmaceutical drugs, medical indications and contraindications to their administration; the side effects of the drugs administration</p> <p>The contemporary methods of non-pharmaceutical treatment options in the patients with the major diseases and clinical conditions according to the current orders of the medical care standards and delivery</p> <p>The mechanism of action of the non-pharmaceutical treatment options, medical indications and contraindications to their administration; the side effects and complications as a result of their administration</p> <p><b>A student is able to:</b></p> <p>To constitute a treatment plan of the diseases and conditions considering the patient's age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards</p> <p>To prescribe the medical treatment by the pharmaceutical drugs for the medical use taking into consideration the list of the vital and the most important pharmaceutical drugs and the programs of additional medicine supply, and also considering the patient's age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards</p> <p>To prescribe the non-pharmaceutical treatment taking into consideration the patient's age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards</p> <p><b>A students uses:</b></p> <p>Development a plan and treatment of the diseases and conditions considering the patient's age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards</p> <p>Prescribing medical treatment by the pharmaceutical drugs for the medical use taking into consideration the list of the vital and the most important pharmaceutical drugs and the programs of additional medicine supply, and also considering the patient's age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards</p> <p>Prescribing the non-pharmaceutical treatment taking into consideration the patient's age, the diagnosis and the clinical disease manifestation in accordance to the current order of medical care delivery and medical care standards</p>	<p>Professional competencies (PC)</p> <p>ability to determine the tactics of managing patients with various nosological forms</p>	<p>PC- 8</p>
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<p><b>A student knows:</b>  The order and the standards of the medical care in internal medicine  The methods of laboratory and instrumental diagnostic tests used for the health evaluation, the major indications for the investigation and the data interpretation  The method of obtaining patient complaints and history from the patients themselves, their relatives, legal representatives, and the people nearby  The method of the patient physical examination  The clinical signs of the abrupt blood circulation and/or respiration cessation  The technique of basic cardio-pulmonary resuscitation  The mechanisms of action of the automated external defibrillator  The external defibrillation technique in case of the abrupt cessation of the cardiac or pulmonary functions</p> <p><b>A student is able to:</b>  To identify the clinical signs of the sudden cardiac and pulmonary arrest  To determine the emergency and the order of amount, content and sequence of the diagnostic measures To identify the indications for emergency medicine team response, including specialised  To use the medical equipment that is included into the general physician' office supply according to the medical care procedure</p> <p><b>A students uses:</b>  Evaluation of the patient condition requiring emergent or urgent medical care  Identification of the sudden cardiac and/or pulmonary arrest  Delivering immediate emergent medical help in case of the sudden cardiac and/or pulmonary arrest</p>	<p>Professional competencies (PC)</p> <p>readiness to participate in the provision of emergency medical care in conditions requiring urgent medical intervention</p>	<p>PC-11</p>
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#### 4. THE COURSE (MODULE) 'Hospital Therapy' SYLLABUS AND CONTENTS

##### 4.1 Total workload is 11 credits (396 ac.h.)

№ 1	Part (Module)	S e m e s t e r	W e e k o f t h e s e m e s t e r	Study forms (including self-study and workload in ac.h.)				Formative assessment (weekly) Summative assessment (by semester)
				Lect ures	Practical classes	Seminars	Self- study	

1	Respiratory diseases	9		2	5,0	-	6,0	QTCA (9)
2	Cardiovascular diseases	9		8	20		21	QTCA (9)
3	Gastrointestinal diseases	9		4	5.0		5	QTCA (9,10)
		10			5.0			
4	Renal diseases	10		2	5.0		5	QTCA (10)
5	Hematologic diseases	10		4	10		11	QTCA (10)
6	Joint and connective tissue diseases	10		4	10		13	QTCA (10)
7	Joint and connective tissue diseases	11		6	15		22	QTCA (11)
8	Renal diseases	11		2	-		32	QTCA (12)
9	Respiratory diseases	11		4	15		17	QTCA (12)
10	Gastrointestinal diseases	11		2	15		17	QTCA (12)
11	Hematologic diseases	11		2	15		20	QTCA (12)
12	Cardiovascular diseases	12		4	24		30	QTCA (12)
	Total:			44	144	-	199	QTCA (12)
	Exam	12		9				
	Total						396/11 Z	

Q - Questions , T –Test , C – Cases, A – Algorithms of performance

Head of Hospital Therapy

and Endocrinology prof.



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