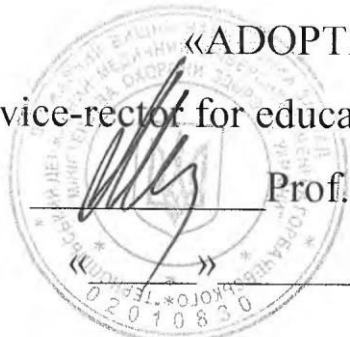


TERNOPIL STATE MEDICAL UNIVERSITY  
after I.YA. GORBACHEVSKY  
Department of Surgery №2

«ADOPTED»  
The vice-rector for educational work  
Prof. A. Shulgay  
2017



**SYLLABUS  
FOR SURGERY  
For the 5th year students**

Direction of training: 1201 Medicine

Specialty : 7.12010001 “«Medicine»”

Faculty: medical

**Academic Year 2017-2018**

The syllabus is worked out by: prof. I.K. Venger;  
ass. prof. A. Vayda

Adopted on the Department of Surgery №2

“29” June 2017, Protocol № 1

Head of the department of  
Department of Surgery №2

prof. I.K. Venger.

Ternopil –2017

## 1. DESCRIPTION OF THE COURSE

Name of indicators	Industry knowledge, direction of training, education level	Characteristics of the course
		full-time education
credits – 4,5	branch of knowledge medicine	Regulatory (optional)
	training direction Medicine 1201	
Modules – 1	Speciality: 7.12010001 "General Medicine"	Year of preparation
Content module – 2		5-th
		semester
Total number of hours – 135		9- th -10- th
Weekly hours for fulltime: classroom - self-learning –	Education level: expert	Lectures
		10 h.
		Practical, seminar
		60 h.
		Laboratory
		independent work
		65 h.
		Individual tasks:
Type of control:		
Current, modular		

Note.

The ratio of hours of classes to independent and individual work is (%):  
for full-time - 51.85: 48.15

## 2. THE PURPOSE AND OBJECTIVES OF THE COURSE

**Purpose:** mastering theoretical and practical knowledge of the etiology, pathogenesis, clinical symptoms typical and atypical diseases, diagnostic methods, conservative and operative treatment, rehabilitation, surgical pathology training program in accordance with the generalist.

**Task:**

- teach students to provide timely trained oral health care in ambulatory or stationary conditions made the principles of family medicine in the form of patients hospitalized healthy lifestyle
- • reveal the practical aspects of urgent and routine medical care to different categories of patients.

**Following the completion of the course the student should Know:**

- Etiologic and pathogenetic factors of the most common surgical diseases according to the list OKH 1;
- Different clinical variants and complications of the most common surgical diseases of the chest cavity, cardiovascular and endocrine systems;
- Diagnostic - therapeutic algorithm of care in urgent conditions in the clinic of surgical diseases;
- Indications and contraindications to surgery as planned and urgent thoracic, cardiovascular, endocrine surgery, during postoperative period;
- Know indications and contraindications to lung transplantation and heart;

**Be able:**

- • Identify the most common symptoms and syndromes in clinical thoracic, cardiovascular, endocrine surgery □ • diagnose and provide medical care in emergency conditions in the clinic thoracic, cardiovascular, endocrine surgery
- • demonstrate the moral and ethical principles of medical specialist and principles of professional subordination in surgery
- • interpret general principles of treatment, rehabilitation and prevention of the most common diseases of the thoracic, cardiovascular, endocrine surgery
- • carry out the prognosis of life and ability to work with the most common diseases of the thoracic, cardiovascular, endocrine surgery
- • Determine the basic etiologic and pathogenetic factors of the most common diseases of the thoracic, cardiovascular, endocrine surgery
- • classify and analyze a typical clinical picture of the most common diseases of the thoracic, cardiovascular, endocrine surgery
- • Develop a plan of examination and analyze information of laboratory and instrumental investigations at typical motion of the most common diseases of the thoracic, cardiovascular, endocrine surgery
- • Identify indications and contraindications to surgery in the planned and urgent thoracic, cardiovascular, endocrine surgery
- • define tactics of postoperative period, appoint necessary treatment
- • demonstrate the ability to perform the necessary medical procedures

### **3. THE PROGRAM OF THE COURSE**

#### **MODULE 2 Thoracic, cardiovascular, endocrine surgery Content module 3 "Chest, cardiovascular, endocrine surgery, lung transplantation basis hearts"**

##### ***Specific objectives:***

- • learn anatomical and physiological characteristics of the chest cavity and endocrine organs;
- • interpret the etiology, pathogenesis and classification, clinical picture of diseases of the chest cavity and endocrinology;
- • identify diagnostic methods, algorithms conservative and surgical treatment of these diseases;
- • determine indications and contraindications to lung transplantation and heart;
- • the principles of post-operative treatment and rehabilitation of patients with disorders of the endocrine and chest cavity;
- • learn the risk factors of complications;
- • interpret the results of laboratory and instrumental research;
- • demonstrate the moral and ethical principles of medical specialist and principles of professional subordination in surgery;
- • carry out the prognosis of life and ability to work with these surgical diseases; □ • interpret general principles of treatment, rehabilitation and prevention of surgical diseases of the endocrine and chest cavity;
- • demonstrate the ability of medical records at the clinic of surgical diseases;
- • provide emergency medical assistance in urgent surgical diseases of the chest cavity.

#### **Content module 4 "Vascular Surgery"**

##### ***Specific objectives:***

- • learn anatomical and physiological characteristics of the vascular system; □ • interpret the etiology, pathogenesis and classification, clinical picture of circulatory system diseases;
- • identify diagnostic methods, algorithms conservative and surgical treatment of diseases of the vascular system and injuries of major vessels;
- • distinguish principles postoperative treatment and rehabilitation of patients with disorders of the vascular system;
- • identify risk factors for complications;
- • interpret the results of laboratory and instrumental research;
- • demonstrate the moral and ethical principles medical specialist and principles of professional subordination in surgery;
- • carry out the prognosis of life and ability to work in surgical diseases of the circulatory system;

- interpret general principles of treatment, rehabilitation and prevention of the most common surgical diseases of the circulatory system;
- demonstrate the ability of medical records at the clinic of surgical diseases;
- Provide emergency medical assistance in urgent states of surgical diseases of the circulatory system (injuries of major vessels).

Names of content modules and topics	number of hours					
	Full-time					
	all	including				
1		p	lab.	ind	s. w.	
1	2	3	4	5	6	7
<b>Module 2 thoracic, cardiovascular, endocrine surgery.</b>						
<b>Module 3. Chest, cardiovascular, endocrine surgery, lung transplantation basis hearts.</b>						
Theme 1 Surgical pathology of the respiratory system. Indications and contraindications to lung transplantation. Storage of donor lungs and transportation	8	2	6			
Theme 2 Chest trauma	6		6			
Topic 3 Diseases of the esophagus. Diaphragmatic hernia. Diseases of mediastinum, diaphragm. Relaxation aperture.	8	2	6			
Theme 4 Coronary heart disease, cardiac rhythm. Emergency surgical myocardial infarction. Surgical pathology of heart. Heart transplantation	6		6			
Theme 5 Euthyroid and diffuse toxic goiter.	8	2	6			
Together for content modules 3	36	6	30			35
<b>Module 4. Vascular Surgery</b>						
Topic 6 Occlusive arterial disease	8	2	6			
Theme 7 Arterial thrombosis and embolism. Thrombosis of the main veins. Postthrombotic syndrome	8	2	6			
Topic 8 Injuries of vessels	6		6			
Topic 9 Varicose veins of the lower extremities. Lymphedema	6		6			
Topic 10 Pulmonary embolism	6		6			
Together for content modules 4	34	4	30			30
Total hours	70	10	60			65
Total hours	135					

#### 4. TOPICS OF PRACTICAL CLASSES

№	Study subject	number of hours
1.	Surgical pathology of the respiratory system. Indications and contraindications to lung transplantation. Storage of donor lungs and transportation	6
2.	Injury to the chest.	6
3.	Diseases of the esophagus. Diaphragmatic hernia. Diseases of mediastinum, diaphragm. Relaxation of the diaphragm.	6
4.	Coronary heart disease, cardiac rhythm. Emergency surgical myocardial infarction. Surgical pathology of heart. Heart transplantation.	6
5.	Euthyroid and diffuse toxic goiter.	6
6.	Occlusive arterial disease.	6
7.	Arterial thrombosis and embolism. Thrombosis of the main veins. Postthrombotic syndrome.	6
8.	Injuries vessels.	6
9.	Varicose veins of the lower extremities. Lymphedema	6
10.	Pulmonary embolism	6
	<b>TOTAL</b>	<b>60</b>

#### 5. TOPICS OF LECTURES

№	The theme of the lecture	number of hours
1.	Diseases of the esophagus. Achalasia, esophageal diverticulum. Clinic. Diagnosis. Indications for surgery. Treatment. Diseases of the mediastinum. Diaphragmatic hernia. Clinic. Diagnosis.	2
2.	Purulent diseases of lungs and pleura. Methods sanitation bronchi. Tactics. Principles of conservative and surgical treatment.	2
3.	Occlusive arterial disease of the lower extremities. Arterial thrombosis and embolism. Diagnosis. Methods of conservative and surgical treatment.	2
4.	Thrombosis of the main veins. Postthromboflebitic syndrome. Varicose disease. Clinic. Diagnosis. Methods of conservative and surgical treatment.	2
5.	Diseases of the thyroid gland. The clinic, diagnosis, treatment tactics, methods of surgical treatment.	2
	<b>TOTAL</b>	<b>10</b>

#### 6. TOPICS OF LABORATORY LESSONS – NONE

## 7. INDEPENDENT WORK

№	THEME	hours
1.	Bronchiectatic disease.	8
2.	Tumours of APUD-system.	8
3.	Endovascular surgery.	8
4.	Diabetic foot.	8
5.	Aneurysm of abdominal aorta.	8
6.	Atherosclerosis of extracranial arteries.	10
7.	Case history curation	15
	<b>TOTAL :</b>	<b>65</b>

## THE LIST OF PRACTICAL SKILLS

№	The name of the skill	The level of possessing	Matricular line	Name of the module
1.	Curation of a patient with chest trauma *	4	V	Thoracic and cardiac surgery
2.	Curation of a patient with purulent diseases of lungs and pleura *	4	V	Thoracic and cardiac surgery
3.	Curation of a patient with varicosity of legs*	4	V	Vascular surgery
4.	Curation of a patient with phlebitis and thrombophlebitis*	4	V	Vascular surgery
5.	Curation of a patient with atherosclerosis obliterans *	4	V	Vascular surgery

\* – the practical skill is submitted in matricule

## 8. INDIVIDUAL LESSONS - NONE

## 9. TEACHING METHODS

According to sources of knowledge, the following teaching methods are used: verbal - story, explanation, lecture, briefing; visual - demonstration, illustration; practical - practical work, tasks.

The nature of the logic of knowledge, the following methods are used: analytical, synthetic, analytical-synthetic, inductive, deductive.

In terms of individual mental activity used methods: problematic, partly retrieval, research.

## 10. METHODS OF CONTROL

### Forms control and evaluation of discipline

In assessing students' knowledge preferred standardized methods of control: test (oral, written, computer), structured written work, structured monitoring of practical skills.

Evaluation of discipline is defined as the assessment for the module, followed by a structured training course.

Evaluation of module is defined as a sum of the current training and assessment of the final module control and expressed per 200 point system.

### Forms of control

The current control is performed on each class to suit specific purposes of the topic. In all workshops is used the objective monitoring of theoretical training and learning practical skills.

### Forms of the current control:

Theoretical knowledge - the tests, computer tests, individual surveys, interviews, written work.

Practical skills and - independent individual tasks and the ability to draw conclusions on their own ability to perform certain transactions, writing schemes and algorithms. Final control is based on theoretical knowledge, practical skills and abilities.

Final control of the module takes place at the end of study unit of the relevant content modules on a test and is considered to be passed if the student scored at least 50 points.

### Forms of final control:

Theoretical knowledge - a system for writing and computer testing.

Practical skills and abilities - Use of the basic methods of medical statistics in conducting and evaluating the biomedical research in view of the main provisions of evidence-based medicine; comprehensive assessment of health in relation to social and environmental factors on a defined territory.

## 11. THE DISTRIBUTION OF POINTS THAT STUDENTS RECEIVE

The maximum number of points assigned to students with learning of each module (test credits) - 200, including the current educational activity - 120 points, the results of final module control - 80 points.

Evaluation of current training activities:

Student at each stage of practical sessions (practical part, seminar discussions, written control) is assigned rating for the 12-point scale. Then derived the arithmetic mean of the three estimates, which is exposed to the log.

In the practical part of each phase of the assessment is proposed as follows:

1. The early practical part, students must commit to carrying out practical work (they need to know the progress of the qualitative reactions, analytical effects, etc.). During this stage the student can gain a maximum of 2 points.

2. During the execution of practical work the teacher carefully monitors, at the end he assesses the results. Maximum for this type of work a student can get 4 points.

3. Protection of practical work. At this stage, the student may receive a maximum of 6 points.

At the end of the practical part of the teacher gives the arithmetic mean of the score for each of the classes and exposes it to every student.

Minimum GPA of at which the student is allowed to take final control module - 4 points.

The maximum amount that can be collected by a student during a module is 120 points.

Modular final control: module final control is at the end of the module.

Before final control students who complete all work stipulated curriculum, and in the study module took score not less than the minimum.

The form of the final evaluation should wake standardized and include control of theoretical and practical training. Specific forms of control of endoscopic surgery are determined in the work study program.



The maximum amount of the final control points is 80.

The final module control is passed if the student scored at least 50 points.

Evaluation of the discipline: Evaluation of endoscopic surgery is exposed only to students who have completed all modules in the discipline. The number of points that a student comes into the discipline is defined as the average number of points of the modules of the discipline and final control of the number of modules 1, 2 and 3.

Objectivity of assessment of learning activities of students must be checked by statistical methods (correlation coefficient between the current progress and results of the final module control).

Conversion of scores in the assessment of endoscopic surgery on a scale ECTS and 4-ball (traditional)

The number of points in the discipline, which is credited to the students converted to ECTS scale so:

Rating ECTS	Statistical index
A	Top 10% of students
B	Next 25% of students
C	Next 30% of students
D	Next 25% of students
E	Last 10% of students

Percentage of students is determined on the sample of students of the course within the relevant specialty.

The number of points in the discipline, which is credited to the students converted to 4-point scale as follows:

Rating ECTS	Rating on the national scale
A	5
B, C	4
D, E	3
FX, F	2

Evaluation of discipline FX and F («2») is assigned to a student who is not enrolled at least one module in the discipline.

Score FX («2») is assigned to students who score a minimum number of points for the current academic activities, but did not pass the final module control. They have the right to repeat the final module control, not more than 2 times during the winter holidays and for two (additional) weeks after the end of the spring semester according to the schedule approved by the Rector.

Students who receive F after assessment study by discipline is completed (not completed the training program at least one module, or not yet in the current learning activity module the minimum number of points) must undergo re-training for individual curriculum.

Grading scale: national and ECTS

Total points for all the educational activities	ECTS	Evaluation on the national scale	
		for examination, project (work) practices	for credit
	A	excellent	Accepted
	B	good	
	C		
	D	satisfactorily	
	E		
	FX	Not satisfactory with the possibility of re-drafting	Not accepted with the possibility of re-drafting
	F	Not satisfactory with the obligatory re-studying subjects	Not accepted with the obligatory re-studying subjects

### 13. METHODOLOGICAL SUPPORT

1. The preparation materials for lectures.

2. Presentations of lectures.
3. Prepare materials for practical lessons
4. Methodical instructions for practical lessons.
5. Variations for individual tasks and individual work of students.
6. Tests for the final test testing.
7. Tests for daily control.
8. Variations of theoretical questions for self-study.

#### **14. LITERATURE**

##### **Basic:**

1. ESC Guidelines on the diagnosis and treatment of peripheral artery, 2014
2. Varicose Veins Full Guideline (July 2013)
3. Prevention and Treatment Of Venous Thromboembolism //International Consensus Statement (Guidelines according to scientific evidence), 2015
4. Pulmonary Embolism Management Guidelines, 2016
5. Management of Pleural Effusion, Empyema, and Lung Abscess, 2013
6. Guidelines for the Diagnosis and Treatment of Spontaneous Pneumothorax, 2016
7. ACG Clinical Guideline: Diagnosis and Management of Achalasia, 2016
8. Hyperthyroidism And Other Causes Of Thyrotoxicosis: Management Guidelines Of The American Thyroid Association And American Association Of Clinical Endocrinologists, 2015
9. ACC/AHA Guidelines for the Management of Patients With Unstable Angina and Non–ST-Segment Elevation Myocardial Infarction, 2016

##### **Additional:**

1. L.Ya.Kovalchuck, Yu.P.Spizhenko, V.F.Sayenko and others. "Hospital surgery". Ternopil: Ukrmendknyga, 1999.
2. M.I.Kuzin "Surgical diseases" – M.:-Medicina,2004.
3. "Facultative Surgery" under the edition of V.O.Shidlovsky – Ternopil: Ukrmedknyga, 2002.
4. Guidelines for intensive care. Ed. A.I. Treschinskogo, F.S. Glumchera K.: High School, 2004.
5. Medical ambulance. For Ed. FS Glumchera, VF K. Moskalenko: "Medicine" - 2006.
6. Eugene Braunwald, Anthony Fauci et al: Harrison's principles of internal medicine. McGraw-Hill. Medical Publishing Division, 15th edition, 2000.
7. Lawrence M. Tierney, Jr. et al: Current Medical Diagnosis and treatment 2000, Lange Medical Books, McGraw-Hill, Health Professions Division, 2000.

8. Christopher R.W. Edwards et al: Davidson's principles and practice of medicine, 17<sup>th</sup>.
9. Gostishchev V.K. General surgery / The manual. – M.: GEOTAR-MED, 2003.
10. Lectures prof. B.I. Dmitriev from Odessa State Medical University.
11. Surgery: Text-book for English medium medical students / S.I. Shevchenko, O.A. Tonkoglas, I.M. Lodyana, R.S. Shevchenko. – Kharkiv: KSMU, 2001.
12. Kushnir R. Ya. General surgery / Lectures.- Ternopil, Ukrmedknyha, 2005.
13. Butyrsky A. General surgery / The manual.- Simpheropol: publishers CGMU, 2004.
14. Oxford handbook of clinical surgery/Edited by G.R. Mc Latchie, D.J. Leaper, 2002.

## **15. Information Resources**

1. [http://intranet.tdmu.edu.ua/data/kafedra/internal/index.php?&path=hospital\\_surgery/classes\\_stud/uk/med/lik/ptn/4/](http://intranet.tdmu.edu.ua/data/kafedra/internal/index.php?&path=hospital_surgery/classes_stud/uk/med/lik/ptn/4/) **Materials prepare students for practical Sanne**  
**Materials prepare students for practical training / Department Surgery №2.**