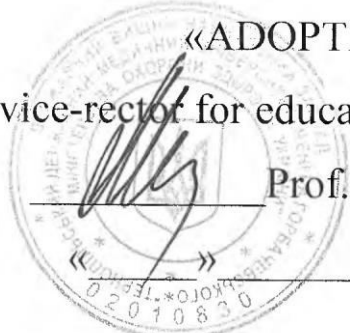


TERNOPIL STATE MEDICAL UNIVERSITY  
after I.YA. GORBACHEVSKY  
Department of Surgery №2

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



**SYLLABUS  
FOR SURGERY  
For the 4th 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 indexes	Discipline Training direction Educational level and qualificational level	Academic discipline characteristics
		Full-time study
Number of credits – 4,5	Discipline _1201 Medicine_	Statutory
	Training direction 1201 Medicine	
Modules – 1	Specialty: 7.12010001 “ General Medicine ”	Academic year
Semantic modules – 2		4-th
		Semester
Hours total – 150		7th - 8th
		Lectures
Weekly hours for fulltime: classroom - self- learning -	Educational qualificational level: specialist and	20 h
		Practical lessons, seminars
		60 h
		Laboratory
		Self-learning
		70 год.
		Individual tasks:
		Type of control:
Module test control		

Note.

Ratio of number of hours of classroom training to self-learning and individual study is (%): for full-time education - 53,33% : 46,66%

## **2. PURPOSE AND TASK OF THE SUBJECT:**

**Objective:** mastering theoretical and practical knowledge of the etiology, pathogenesis, and clinical symptoms of typical and atypical diseases of the abdominal cavity, diagnostic methods, conservative and operative treatment, rehabilitation of patients with surgical pathology in accordance to the doctor's training program. Objectives:

- To teach students to provide timely trained health care in ambulatory or hospital department, provides the principles of family medicine and organize patient's healthy lifestyle.
- To learn the practical aspects of urgent and planned medical care for different categories of patients.

### **At the end of the course the student should know:**

- etiological and pathogenic 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 abdominal cavity;
- diagnostic algorithm of the first aids on emergency in the surgical department;
- indications and contraindications to operative treatment at planned and urgent abdominal surgery, care of the postoperative period;
- prevention methods of HIV infection and transmission of HIV from mother to child. Diagnostic and treatment of HIV - infection, social and psychological support for people living with HIV.

### **At the end of the course the student should be able to:**

- identify the most common symptoms and syndromes in the clinic of surgical diseases
- diagnose and provide medical care in emergency conditions in the clinic of surgical diseases
- demonstrate the moral and ethical principles of medical specialist and principles of professional subordination in surgery
- interpret the general principles of treatment, rehabilitation and prevention of the most common surgical diseases
- carry out the prognosis of life and ability to work with the most common surgical diseases
- identify major etiological and pathogenic factors of the most common surgical diseases
- classify and analyze a typical clinical picture of the most common surgical diseases
- propose a plan of examination and analyze information of laboratory and instrumental investigations at typical motion of the most common surgical diseases
- define the indications and contraindications to surgery at the planned and urgent abdominal surgery
- define tactics of postoperative period, prescribe necessary treatment
- demonstrate the ability to perform the necessary medical procedures

### **3. THE PROGRAM OF THE COURSE MODULE 1. ABDOMINAL SURGERY**

#### **SEMANTIC MODULE 1 "URGENT ABDOMINAL SURGERY"**

##### **Specific goals:**

- To learn anatomical and physiological characteristics of the abdominal cavity;
- To interpret the etiology, pathogenesis, classification and clinical picture of the urgent abdominal diseases: to determine diagnostic methods, algorithms of the conservative and surgical treatment of these diseases;
- To learn differential diagnosis with other acute diseases of the abdomen, retroperitoneal space and chest;
- To distinguish principles of postoperative treatment and rehabilitation of patients with urgent abdominal pathology;
- To learn the indications for emergency, urgent (24-48 hours) operations; • To identify indications for minimal invasive (controlled by ultrasound and laparoscopic) surgery;
- To identify the risk factors of complications; interpret the results of laboratory and instrumental investigation;
- To demonstrate the moral and ethical principles of medical specialist and principles of professional subordination in surgery;
- To carry out the prognosis of life and ability to work after urgent abdominal surgical diseases;
- To interpret general principles of treatment, rehabilitation and prevention of the most common surgical diseases;
- To be able to use medical records in the clinic of surgical diseases;
- To provide emergency medical care in case of urgent abdominal surgical diseases.

#### **SEMANTIC MODULE 2 "SURGICAL GASTROENTEROLOGY, PROCTOLOGY, BASIS OF LIVER, PANCREAS, INTESTINE TRANSPLANTATION "**

##### **Specific goals:**

- To learn anatomical and physiological characteristics of the abdominal cavity; • To interpret the etiology, pathogenesis, classification and clinical picture of the urgent abdominal diseases: to determine diagnostic methods, algorithms of the conservative and surgical treatment of these diseases;
- To learn differential diagnosis with other acute diseases of the abdomen, retroperitoneal space and chest;
- To distinguish principles of postoperative treatment and rehabilitation of patients with urgent abdominal pathology;
- To identify indications for minimal invasive (controlled by ultrasound and laparoscopic) surgery;
- To identify the risk factors of complications; interpret the results of laboratory and instrumental investigation;

- To demonstrate the moral and ethical principles of medical specialist and principles of professional subordination in surgery;
- To carry out the prognosis of life and ability to work after urgent abdominal surgical diseases;
- To interpret general principles of treatment, rehabilitation and prevention of the most common surgical diseases;
- To be able to use medical records in the clinic of surgical diseases;
- To provide emergency medical care in case of urgent abdominal surgical diseases.

Names of content modules and topics	Number of hours					
	Full-time					
	all	including				
		1	p	lab.	ind.	c.p.
1	2	3	4	5	6	7
<b>Module 1 Abdominal surgery</b>						
<b>Module 1. URGENT ABDOMINAL SURGERY</b>						
Theme 1. Acute appendicitis. Complications of acute appendicitis. Features of motion of acute appendicitis in children, pregnant women, elderly patients.	8	2	6			
Theme 2. Acute complications of gastric ulcer and duodenum.	8	2	6			
Theme 3. Acute intestinal obstruction. Etiology and pathogenesis, classification, clinical manifestations, diagnosis and differential diagnosis, treatment strategy.	8	2	6			
Theme 4. Acute peritonitis. The clinical picture, diagnosis and differential diagnosis, treatment strategy. Local peritonitis. Clinical forms of peritonitis.	8	2	6			
Topic 5. Acute cholecystitis. Complications of acute cholecystitis. The clinic, diagnosis and differential diagnosis, treatment strategy. Diseases of liver, disease of the extrahepatic bile ducts, postcholecystectomy syndrome. Liver transplantation.	10	4	6			
Topic 6. Acute pancreatitis. Etiology and pathogenesis, classification, clinical manifestations, diagnosis and differential diagnosis, treatment strategy. Complications of pancreatitis. Indications for pancreas transplantation. Diseases of the spleen.	8	2	6			
<b>Total for 1 Content module</b>	<b>50</b>	<b>14</b>	<b>36</b>			<b>44</b>

<b>Module 2 SURGICAL GASTROENTEROLOGY, PROCTOLOGY, LIVER, PANCREAS, INTESTINES TRANSPLANTATION</b>						
Theme 7. External and internal abdominal hernia and its complications.	8	2	6			
Theme 8. Endemic, sporadic goiter. Diffuse goiter. Thyrotoxicosis, thyroiditis.	8	2	6			
Theme 9. Surgery of the stomach, duodenum, and postresection and postvagotomy syndromes.	8	2	6			
Topic 10. Diseases of the small and large intestine. Diseases of the rectum. Indications for intestinal transplantation. Diseases of the soft tissues of the perineum.	6		6			
Together for the Semantic module 2	30	6	24			26
Total hours	80	20	60			70
Final module control	2					
Total hours	135					

#### 4. TOPICS OF PRACTICAL CLASSES

	<b>Topic</b>	<b>Number hours</b>
1.	Acute appendicitis. Complications of acute appendicitis. Features of motion of acute appendicitis in children, pregnant women, elderly patients	6
2.	Acute complications of gastric ulcer and duodenum.	6
3.	Acute intestinal obstruction. Etiology and pathogenesis, classification, clinical manifestations, diagnosis and differential diagnosis, treatment strategy.	6
4.	Acute peritonitis. The clinical picture, diagnosis and differential diagnosis, treatment strategy. Local peritonitis. Certain clinical forms of peritonitis.	6
5.	Acute cholecystitis. Complications of acute cholecystitis. The clinic, diagnosis and differential diagnosis, treatment strategy. Diseases of liver, disease of the extrahepatic bile ducts, postcholecystectomy syndrome. Liver transplantation	6
6.	Acute pancreatitis. Etiology and pathogenesis, classification, clinical manifestations, diagnosis and differential diagnosis, treatment strategy. Complications of pancreatitis. Indications for pancreas transplantation. Diseases of spleen	6
7.	External and internal abdominal hernia and their complications.	6
8.	Endemic, sporadic goiter. Diffuse goiter. Thyrotoxicosis, thyroiditis.	6
9.	Surgery of the stomach, duodenum, and postresection and postvagotomy syndromes.	6
10.	Diseases of the small and large intestine. Diseases of the rectum. Indications for intestinal transplantation. Diseases of the soft tissues of the perineum	6
	<b>Total</b>	<b>60</b>

## 5. TOPICS OF LECTURES

	<b>Topic</b>	<b>Number hours</b>
1.	Acute appendicitis. Complications of acute appendicitis. Features of motion of acute appendicitis in children, pregnant women, elderly patients	2
2.	Acute complications of gastric ulcers and 12 duodenal ulcer.	2
3.	Acute intestinal obstruction. Etiology and pathogenesis, classification, clinical manifestations, diagnosis and differential diagnosis, treatment strategy.	2
4.	Acute peritonitis. The clinical picture, diagnosis and differential diagnosis, treatment strategy. Local peritonitis. Certain clinical forms of peritonitis.	2
5.	Acute cholecystitis. Complications of acute cholecystitis. The clinic, diagnosis and differential diagnosis, treatment strategy. Diseases of liver, disease of the extrahepatic bile ducts, postcholecystectomy syndrome. The role of minimally invasive methods of diagnosis and treatment.	2
6.	Acute pancreatitis. Etiology and pathogenesis, clinic, features, differential diagnosis and treatment of acute uncomplicated and complicated pancreatitis.	2
7.	The abdominal hernia: inguinal, femoral, umbilical, linea alba. Anatomical and physiological characteristics, clinical features, diagnosis, treatment hernia. Complications of hernia, strangulation, inflammation, coprostasis.	2
8.	Diseases of the rectum. Diseases of the soft tissues of the perineum. Hemorrhoids. Paraproctitis. Anal fissure.	2
9.	Surgery of the stomach, duodenum and small intestine. Postresection and postvagotomy syndromes.	2
10.	Diseases of the small and large intestine. UUC. Crohn disease.	2
	<b>Together</b>	<b>20</b>

## 6. TOPICS OF LABORATORY LESSONS – NONE

## 7. INDEPENDENT WORK

№	THEME	hours	credits
1.	Complication after gastric surgery	4	
2.	Abdominal ischemic syndrome	6	
3.	Thrombosis of mesenteric vessels of the bowel.	6	
4.	Tumours of APUD-system.	6	
5.	Intestinal fistula.	5	
6.	Case history curation	8	
	<b>TOTAL :</b>	<b>35</b>	<b>1,2</b>

## THE LIST OF PRACTICAL SKILLS

№	The name of the skill	The level of possessing	Matricular line	Name of the module
1	To assess the signs of acute cholecystitis*	4	IV	urgent abdominal surgery
2	To assess the appendicular signs*	4	IV	urgent abdominal surgery
3	To assess the signs of intestinal obstruction*	4	IV	urgent abdominal surgery
4	To assess the signs of perforative ulcer*	4	IV	urgent abdominal surgery
5	To assess the signs of pancreatitis*	4	IV	urgent abdominal surgery
6	To assess the signs of peritoneum irritation*	4	IV	urgent abdominal surgery
8	Palpation of thyroid gland*	4	IV	surgical gastroenterology

\* – the practical skill is submitted in matricule

5.

## 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, course 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. Hyperthyroidism And Other Causes Of Thyrotoxicosis: Management Guidelines Of The American Thyroid Association And American Association Of Clinical Endocrinologists, 2015
2. WSES Jerusalem Guidelines For Diagnosis And Treatment Of Acute Appendicitis, 2014
3. Protocol for Diagnosis and Treatment of Peptic Ulcer in Adults //American International Health Alliance: Clinical Practice Guidelines for General Practitioners, 2017
4. Clinical Guideline For The Treatment Of CAPD Peritonitis, 2015

5. EASL Clinical Practice Guidelines on the Prevention, Diagnosis and Treatment of Gallstones, 2014
6. Practice Guidelines in Acute Pancreatitis, 2014
7. European Hernia Society guidelines on the treatment of inguinal hernia in adult patients, 2017
8. Practice Parameters for the Management of Hemorrhoids (Guidelines 2010)

**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.