

**Ministry of Health of Ukraine  
Poltava State Medical University**

**Department of surgery № 1**

**SYLLABUS**

***Surgery***

Normative discipline

level of higher education	the second (master's) level of higher education
field of knowledge	22 «Healthcare»
specialty	222 «Medicine»
academic qualification	Master of Medicine
professional qualification	Medical Doctor
academic and professional program	222 «Medicine»
mode of study	full-time
course(s) and semester(s) of study of the discipline	IV year, 7-8 semesters

**«APPROVED»**

At the meeting of Department of Surgery № 1

Acting head of Department \_\_\_\_\_ Mykola KRAVTSIV

Protocol from **29 AUG 2023 № 1**

## INFORMATION ABOUT LECTURERS WHO DELIVER THE ACADEMIC DISCIPLINE

Surname, name, patronymic of the lecturer (lecturers), scientific degree, academic title	V. I. Liakhovskyi, Doctor of Medical Sciences, Professor R. B. Lysenko, Doctor of Medical Sciences, professor I. I. Niemchenko, Candidate of Medical Sciences, associate professor O. M. Liulka, Candidate of Medical Sciences, associate professor T. V. Horodova-Andrieieva, assistant professor R. M. Riabushko, Candidate of Medical Sciences, associate professor O. H. Krasnov, Candidate of Medical Sciences, associate professor
Profile of the lecturer (lecturers)	<a href="https://surgery-one.pdmu.edu.ua/team">https://surgery-one.pdmu.edu.ua/team</a>
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## MAIN CHARACTERISTICS OF THE ACADEMIC DISCIPLINE

### The scope of the academic discipline (module)

Number of credits / hours – **4,5/135**,

of which:

Lectures (hours) – **8**

Practical classes (hours) – **70**

Self-directed work (hours) – **57**

Type of control – semester final certification

### The policy of the academic discipline

The policy of the discipline is determined by the system of requirements that the teacher imposes on the student in the study of the discipline and based on the principles of academic integrity. Requirements for attending classes (inadmissibility of absences, delays, etc.); rules of behaving in the classroom (active participation, performing of the necessary minimum of educational work, disconnection of phones, observance of the established form of clothes in the operating room, etc.); incentives and penalties (for which points can be accrued or deducted, etc.).

The policy of the academic discipline is built taking into account the norms of the legislation of Ukraine on academic integrity, the Charter and provisions of the PSMU and other normative documents.

Example: When organizing the educational process at PSMU, lecturers and students act in accordance with:

- Regulation on the organization of the educational process at Poltava State

## Medical University

- Regulation on the academic integrity of recipients of higher education and employees of Poltava State Medical University
- Internal code of conduct for students of Poltava State Medical University
- Regulation on the organization and methods for assessment of educational activities of higher education recipients at Poltava State Medical University
- Regulation on the organization of self-directed work of students at Poltava State Medical University
- Regulation on retaking missed classes and making up unsatisfactory grades by the recipients of higher education at Poltava State Medical University
- Regulation on the procedure of forming the individual educational trajectories for the recipients of higher education at Poltava State Medical University
- Regulation on the procedure of credit transfer for academic disciplines and calculation of academic difference
- Regulation on the appeal claim for the results of final control of academic performance for recipients of higher education
- Regulation on rating the recipients of higher education at Poltava State Medical University
- Regulation on the financial incentives for academic success of students at Poltava State Medical University.

<https://www.pdmu.edu.ua/n-process/department-npr/normativni-dokumenti>.

**Description of the academic discipline (summary):** Surgery is a branch of medicine that studies pathological conditions and diseases that are treated surgically. The study of the discipline "Surgery" begins with abdominal surgery, as a section of medical knowledge that covers the diagnosis and treatment of diseases of the abdominal cavity and abdominal wall.

The subject of the discipline "Surgery" is a set of theoretical and practical issues aimed at mastering clinical manifestations, methods of examination and treatment, the principles of emergency care for patients with the most common surgical diseases of the abdominal cavity in the surgical clinic, as well as the rules of differential diagnosis and methods of prevention of surgical diseases.

### **Pre-requisites and post-requisites of the academic discipline**

Discipline "Surgery" is based on the knowledge gained by students during the study of such fundamental disciplines as "Human Anatomy", "Histology, Cytology and Embryology", "Physiology", "Pathomorphology", "Pathophysiology", as well as clinical disciplines: "General Surgery", "Operative Surgery and Topographic Anatomy", "Propaedeutics of Internal Medicine", "Propaedeutics of Pediatrics", "Radiology", "Pharmacology" and integrates with these disciplines.

The study of "Surgery" involves integration with disciplines that use surgical treatments: "Traumatology and Orthopedics", "Neurosurgery", "Anesthesiology and Intensive Care", "Urology", "Obstetrics and Gynecology" and other clinical disciplines: "Therapy", "Endocrinology", "Functional diagnostics", etc. These interactions form the ability to apply knowledge in the process of professional activity at the level of the doctor.

### **The aim and tasks of the academic discipline:**

The aim of studying the academic discipline is a set of theoretical and practical issues aimed at mastering clinical manifestations, methods of examination and treatment, the principles of emergency care for patients with the most common surgical diseases of the abdominal cavity in the surgical clinic. also the rules of differential diagnosis and methods of prevention of surgical diseases

**The main tasks of studying the discipline are:**

- Assimilate the anatomical and physiological features of the abdominal organs;
- Interpret the etiology, pathogenesis, classification, clinical manifestations of urgent diseases of the abdominal cavity;
- To define methods of diagnostics, algorithms of conservative and operative treatment of the specified diseases;
- Master the differential diagnosis with other acute diseases of the abdominal cavity, extraperitoneal space and chest;
- Distinguish the principles of postoperative treatment and rehabilitation of patients with urgent abdominal pathology;
- Assimilate readings for urgent, urgent (24-48 hours) operations;
- Identify indications for minimally invasive interventions (under the control of ultrasound and laparoscopic);
- Identify risk factors for complications;
- Interpret the results of laboratory and instrumental research;
- Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in surgery;
- To predict life and work capacity in case of urgent abdominal surgical diseases;
- Interpret the general principles of treatment, rehabilitation and prevention of the most common surgical diseases;
- Demonstrate the ability to keep medical records in a surgical clinic;
- Provide emergency medical care for urgent abdominal surgical diseases.

**Competences and learning outcomes in accordance with the academic and professional program, the formation of which is facilitated by the discipline (integral, general, special)**

**1. Integral:**

Ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.

**2. General:**

- Ability to learn and master modern knowledge.
- Ability to plan and manage time.
- Skills in the use of information and communication technologies.
- Ability to abstract thinking, analysis and synthesis.
- Ability to apply knowledge in practical situations.
- Knowledge and understanding of the subject area and understanding of professional activity.
- Ability to adapt and act in a new situation.
- Ability to make informed decisions.

- Ability to work in a team.
- Interpersonal skills.
- Definiteness and perseverance in terms of tasks and responsibilities.
- Ability to act on ethical considerations.
- The desire to preserve the environment.

### **3. Special (professional, subject):**

- Collect anamnesis and determine the main etiological and pathogenetic factors in the most common surgical diseases.
- Conduct an objective examination of the patient with the most common surgical diseases.
- Classify and analyze the typical clinical picture of the most common surgical diseases and assess the severity of clinical manifestations of the disease.
- Make a plan of examination and analyze the results of laboratory and instrumental examinations for the most common surgical diseases
- Carry out differential diagnosis of the most common surgical diseases and formulate a preliminary diagnosis.
- Diagnose and provide medical care for emergencies in surgical diseases.
- Provide first aid.
- To determine treatment tactics (principles of surgical interventions and conservative treatment, rehabilitation measures) for the most common surgical diseases and their complications.
- Diagnose various clinical variants of the course, atypical forms and complications of the most common surgical diseases.
- Demonstrate the ability to perform the necessary medical manipulations.
- Prevent the most common surgical diseases.

**Program learning outcomes**, the formation of which is facilitated by the discipline:

- Know the structure and functions of individual organs and systems and the human body as a whole in the norm, with the development of pathological processes, diseases; be able to use the acquired knowledge in further training and in the practice of the doctor.
- Collect data on patient complaints, life history (professional history in particular) in a health care facility and / or at the patient's home, according to a standard survey scheme.
- Assign and analyze additional (mandatory and optional) screening methods (laboratory, radiological, functional and / or instrumental). Evaluate information for the purpose of differential diagnosis of diseases, using knowledge about the person, his organs and systems, based on the results of laboratory and instrumental studies.
- Establish preliminary and clinical diagnosis of the disease on the basis of leading clinical symptoms or syndromes by making an informed decision and logical analysis, using the most probable or syndromic diagnosis, laboratory and instrumental examination data, conclusions of differential diagnosis, knowledge of man, his organs and systems. relevant ethical and legal norms.
- Determine the necessary mode of work and rest in the treatment of the disease in a health care facility, at home of the patient and at the stages of medical evacuation, including in the field, on the basis of a preliminary clinical diagnosis, using

knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- Prescribe the necessary medical nutrition in the treatment of the disease, in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.
- To determine the nature of treatment of the disease (conservative, operative) and its principles in the health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.
- Diagnose emergencies and make a diagnosis by making an informed decision and assessing the person's condition under any circumstances (at home, on the street, in a health care facility), including in emergency situations, in field conditions, in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about a person, his organs and systems, adhering to the relevant ethical and legal norms.
- Determine the tactics of emergency medical care, under any circumstances, using knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, based on the diagnosis in a limited time using standard schemes.
- Provide emergency medical care under any circumstances, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, based on the diagnosis of emergency in a limited time according to certain tactics, using standard schemes.
- Perform medical manipulations in a health care setting, at home or at work on the basis of a previous clinical diagnosis and / or indicators of the patient's condition, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making informed decisions and using standard techniques.
- Maintain medical records of the patient and the population on the basis of regulations, using standard technology. Prepare reports on personal production activities, using official accounting documents in the standard form.
- Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.
- To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to constantly improve their professional and cultural levels.
- Adhere to the requirements of ethics, bioethics and deontology in their professional activities.
- Ensure the required level of individual safety in the event of typical dangerous situations in the individual field of activity.

**Learning outcomes of the academic discipline:** upon completing their study in

the academic discipline, students must:

**know:**

- Moral and deontological principles of behavior of a medical specialist and the principles of professional subordination in a surgical clinic
- The main etiological and pathogenetic factors of the most common surgical diseases of the abdominal cavity
- Typical clinical picture of the most common surgical diseases of the abdominal cavity
- Examination plan and interpretation of laboratory and instrumental examinations data in the typical course of the most common surgical diseases of the abdominal cavity
- Principles of treatment, rehabilitation and prevention of the most common surgical diseases of the abdominal cavity
- Principles of predicting life and efficiency in the most common surgical diseases of the abdominal cavity
- Principles of diagnosing and providing medical care to patients with emergencies in the clinic of surgical diseases

**be able to:**

- Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in surgery
- Demonstrate the ability to perform the necessary medical manipulations
- Carry out primary and secondary prevention of the most common surgical diseases
- Provide emergency medical care for the most common surgical diseases
- Carry out differential diagnosis, substantiate and formulate a preliminary diagnosis of the most common surgical diseases in emergency and planned surgery
- To determine the tactics of management (principles of surgical interventions and conservative treatment, rehabilitation measures) with the most common surgical diseases and their complications
- Plan examination of the patient, interpret the results of laboratory and instrumental research methods in the most common surgical diseases and their complications
- Identify different clinical variants and complications of the most common surgical diseases
- Demonstrate the ability to keep medical records in the clinic of surgical diseases
- Diagnose complicated and atypical forms of the most common surgical diseases
- Plan a scheme of examination of a particular patient depending on the features of the clinical course of the disease
- Provide medical care for emergencies in the clinic of surgical diseases and perform emergency surgical manipulations and operations
- To determine the plan of conservative and operative treatment of surgical diseases depending on pathogenetic factors and severity of the patient's condition

**Thematic plan of lectures (by modules), specifying the basic issues, which are considered at the lecture**

#	Title of the topic	Number of hours
	Module 1. Urgent abdominal surgery	
1	Introduction. Acute appendicitis: 1. Anatomical and physiological information, 2. Etiology and pathogenesis, 3. Classification, clinic, diagnosis, 4. Tactics of treatment.	2
2	Acute cholecystitis. Peritonitis. 1. Anatomical and physiological information, 2. Etiology and pathogenesis, 3. Classification, clinic, diagnosis, 4. Surgical tactics.	2
	Module 2. Surgical gastroenterology, herniology and proctology	
1	Gastrointestinal bleeding of ulcerative etiology. 1. Etiopathogenesis, 2. Classification and clinic of ulcerative hemorrhage, 3. Laboratory and endoscopic diagnostic methods 4. Therapeutic tactics.	2
2	External abdominal hernias and their complications. 1. Inguinal, femoral, umbilical, white line hernia and postoperative hernia, 2. Classification, clinic, diagnosis, treatment tactics 3. Laparoscopic methods of hernioplasty. 4. Complications of hernias. Acute: pinching, inflammation, trauma, intestinal obstruction. Chronic: irreversibility, malignancy 5. Classification, clinic, diagnosis 6. Surgical tactics.	2
	Total	8

**Thematic plan of seminar classes by modules and content modules, specifying the basic issues, which are considered at the seminar class – not available**

**Thematic plan of practical classes by modules and content modules, specifying the basic issues, which are considered at the practical class**

Seq. No.	Title of the topic	Number of
	Module 1. Urgent abdominal surgery	
1	<b>Acute appendicitis.</b> Etiology and pathogenesis. Classification, clinic, diagnosis, differential diagnosis. Treatment tactics. Curation of patients.	4



2	<b>Complications of acute appendicitis and appendectomy:</b> appendicular infiltrate, appendicular abscess, interloopal, pelvic and subphrenic abscesses, pyelonephritis. Clinic, diagnosis, treatment tactics. Atypical clinical picture of acute appendicitis.	4
3	<b>Acute cholecystitis.</b> Anatomical and physiological features of the biliary tract. Classification of acute cholecystitis, clinic, diagnosis, differential diagnosis. Surgical tactics.	4
4	<b>Complications of acute cholecystitis and cholecystectomy.</b> Diagnosis and surgical tactics. Postcholecystectomy syndrome. Diseases of the extrahepatic bile ducts. Choledocholithiasis. Mechanical jaundice. Stricture of the biliary tract. Etiology and pathogenesis. Classification, clinic, diagnosis, treatment.	4
5	<b>Acute pancreatitis.</b> Anatomical and physiological features of the pancreas. Etiology. Pathogenesis of acute pancreatitis, classification, clinical picture, diagnosis, differential diagnosis. Complications of acute pancreatitis: acute pseudocyst of the pancreas, pancreatic abscess, widespread peritonitis, necrosis of the walls of the cavity, bleeding into the abdominal cavity, acute ulcers of the digestive tract. Modern treatment tactics for acute pancreatitis.	4
6	<b>Peritonitis.</b> Anatomical and physiological features of the peritoneum. Classification of peritonitis, etiology and pathogenesis. Diagnostic program. Tactics and modern methods of complex treatment of patients with peritonitis (surgical methods, intensive care, detoxification methods). Limited forms of peritonitis: pelvic, subhepatic, subphrenic, intestinal. Clinic. Diagnosis. Differential diagnosis. Treatment.	4
7	<b>Acute intestinal obstruction.</b> Determination of intestinal obstruction. Classification. Etiology and pathogenesis. Clinical signs, diagnosis, the role of auxiliary examination methods, examination algorithm, treatment tactics. Mechanical (obturation, strangulation and mixed) intestinal obstruction. Clinic, diagnostics, differential diagnosis, surgical tactics. Functional intestinal obstruction. Etiology and pathogenesis, clinic, diagnosis, surgical tactics	4
8	<b>Complicated peptic ulcer disease.</b> Perforated gastroduodenal ulcers. Etiology and pathogenesis. Classification of perforated gastroduodenal ulcer. Clinic of typical and atypical perforated gastroduodenal ulcer. Therapeutic tactics for perforated gastroduodenal ulcer.	4

9	<b>Ulcerative bleeding.</b> Etiopathogenesis, classification and clinic of ulcerative hemorrhage. Laboratory and endoscopic methods for the diagnosis of ulcerative hemorrhage. Therapeutic tactics for ulcerative hemorrhage.	4
<b>Module 2. Surgical gastroenterology, herniology and proctology</b>		
10	<b>Complications of peptic ulcer of the stomach and duodenum:</b> penetration, pylorostenosis, malignancy. Classification. Clinic. Diagnosis and differential diagnosis. Conservative and operative treatment, types of operations. Diseases of the operated stomach.	4
11	<b>Liver disease.</b> Fibrosis. Cirrhosis. Hepatic failure. Parasitic and non-parasitic liver lesions. Clinic. Examination methods. Complication. Principles of treatment tactics. Liver transplantation, medical and legal aspects. Diseases of the spleen.	4
12	<b>Chronic pancreatitis.</b> Complications of chronic pancreatitis. Cysts. Fistulas. Clinic. Diagnostic methods. Differential diagnosis. Principles of treatment. Principles of surgical tactics. Pancreas transplantation, medical and legal aspects.	4
13	<b>Diseases of the small and large intestine.</b> Nonspecific ulcerative colitis. Crohn's disease. Colon polyp, polyposis. Diverticular disease of the colon, its complications. Pathogenesis, pathomorphology, classification, clinic, diagnosis, instrumental research methods, differential diagnosis. Methods of treatment. Intestinal transplantation, medical and legal aspects.	4
14	<b>External and internal hernias.</b> General doctrine of hernia, elements of hernia, classification of hernia. General semiotics. Inguinal, femoral, umbilical, white line hernia and postoperative hernia. Classification, clinic, diagnosis, differential diagnosis, treatment tactics, prognosis. Laparoscopic methods of hernioplasty.	4
15	<b>Complications of hernias.</b> Acute: pinching, inflammation, trauma, intestinal obstruction. Chronic: irreversibility, malignancy. Classification, clinic, diagnosis, differential diagnosis. Surgical tactics.	4

16	<b>Surgical diseases of the rectum:</b> acute and chronic hemorrhoids, anal fissure, acute and chronic paraproctitis, rectal prolapse, epithelial coccygeal passages. Methods of proctological examination of patients. Diagnosis and differential diagnosis. Treatment tactics. Complications after rectal surgery. Diseases of the soft tissues of the perineum. Perineal omission syndrome. Pyoderma of the perineum. Perineal condyloma. Epithelial coccygeal immersion. Classification. Clinic. Diagnosis. Differential diagnosis. Principles of treatment.	4
17	<b>Patient observation and case history reporting*</b>	4
18	<b>Final module control</b>	2
	<b>Total</b>	<b>70</b>

### Self-directed work

Seq. No.	Title of the topic	Number of hours
1.	Preparation for practical classes – theoretical preparation and development of practical skills	38
2.	1. Abdominal compartment syndrome. Etiology, pathogenesis, clinic, diagnosis, treatment. 2. Relaparotomy and laparostomy in the treatment of disseminated peritonitis. Indications, features, postoperative management. 3. Open and closed injuries of the stomach, duodenum, pancreas, spleen. Features of diagnosis, clinical manifestations and methods of treatment. 4. Phlegmon of the stomach. Etiology, clinic diagnosis, treatment 5. Malabsorption syndrome, maldigestion syndrome. etiopathogenesis clinic diagnosis, treatment	3 3 3 3 3
3.	Preparation for the final test control	4
4.	Total	57

### Individual tasks

1. Compiling a list of references on the topics of Module 1.
2. Writing an abstract on one of the topics on the materials of scientific journals.
3. Preparation of a report for participation in a scientific student conference.
4. Participation in the development of innovation proposals.
5. Educational videos.

### The list of theoretical questions for students' preparation for the final module control and semester final attestation

1. Anatomical and functional information about the cecum and appendicular process.
2. Methods of examination of patients with acute appendicitis.

3. Clinic of acute appendicitis. Etiology and pathogenesis of acute appendicitis. Differential diagnosis of acute appendicitis. Complications of acute appendicitis.
4. Peculiarities of acute appendicitis in children, pregnant women, elderly patients.
5. Appendicular infiltrate (clinic, diagnosis, treatment tactics).
6. Appendicular abscess (clinic, diagnosis, treatment tactics).
7. Pylephlebitis (clinic, diagnosis, treatment tactics).
8. Subphrenic abscess (clinic, diagnosis, treatment tactics).
9. Technique of typical appendectomy. Laparoscopic appendectomy. Complications of appendectomy.
10. Features of surgical equipment depending on the form of acute appendicitis and the location of the appendicular process. Management of the postoperative period
11. Type of access and scope of surgery for various complications of acute appendicitis
12. Complications of appendectomy in the early and late postoperative period
13. Anatomical and functional information about the gallbladder and extrahepatic bile ducts.
14. Etiology and pathogenesis of acute cholecystitis. Classification of acute cholecystitis.
15. Methods of examination of patients with acute cholecystitis
16. Clinical picture of acute cholecystitis, features in young and senile people.
17. Differential diagnosis of acute cholecystitis
18. Diagnostic program. Therapeutic program.
19. Complications of acute cholecystitis.
20. Features of the clinical picture of acute cholecystitis with concomitant pathology.
21. Clinical picture of complications of acute cholecystitis and their differential diagnosis.
22. Indications for emergency operations. Indications for urgent operations (24-48 hours).
23. The nature of surgical interventions in acute cholecystitis.
24. The nature of surgical interventions for complications of acute cholecystitis.
25. Indications for minimally invasive surgical interventions (endoscopic, laparoscopic, CT and ultrasound). Intraoperative complications and their treatment.
26. Postoperative complications and their prevention and treatment.
27. Preoperative preparation of patients. Postoperative management of patients.
28. Mechanical jaundice. Etiology. Pathogenesis. Clinic. Diagnosis.
29. Post-cholecystectomy syndrome. Classification. Clinic. Diagnosis.
30. Anatomical and functional information about the pancreas.
31. Etiology and pathogenesis of acute pancreatitis. Classification of acute pancreatitis.
32. Methods of examination of patients with acute pancreatitis. Diagnostic program.
33. Typical clinical picture of acute pancreatitis. Therapeutic tactics.
34. Differential diagnosis of acute pancreatitis. Complications of acute pancreatitis. Features of the clinical picture of acute pancreatitis in the presence of concomitant pathology.
35. Clinical picture of complications of acute pancreatitis and their differential diagnosis.
36. Indications for surgery. The nature of surgical interventions in acute pancreatitis.
37. The nature of surgical interventions for complications of acute pancreatitis.
38. Indications for minimally invasive operations (endo-, laparoscopic, under the control of sonography).
39. Intraoperative and postoperative complications, their prevention and treatment.
40. Preoperative preparation of patients. Management of patients in the postoperative period.

41. Chronic pancreatitis. Classification. Clinic. Diagnosis. Treatment.
42. Chronic pancreatitis - a cyst of the pancreas. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment.
43. Chronic pancreatitis. Fistulas of the pancreas. Etiopathogenesis. Clinic. Diagnosis.
44. Open and closed injuries of the pancreas. Clinic. Diagnosis. Treatment.
45. Anatomical and functional information about the stomach and duodenum.
46. Methods of examination of patients with perforated ulcer.
47. Etiology and pathogenesis of perforated ulcer.
48. Classification of perforated ulcer. Clinic of a typical perforated ulcer.
49. Differential diagnosis of perforated ulcer.
50. Features of the course of atypical, covered perforated ulcer.
51. Features of the perforated ulcer in the omental sac.
52. Features of the perforated ulcer in the retroperitoneal space.
53. The choice of the scope of surgery for perforated ulcer.
54. Technique of suturing a perforated ulcer. Technique of pyloroduodenoplasty.
55. The choice of method of performing vagotomy and pyloroduodenoplasty. Indications and technique of selective vagotomy and antrumectomy.
56. Indications and technique of elective proximal vagotomy and pyloroduodenoplasty.
57. Indications and technique of gastrectomy for perforated ulcer.
58. Laparoscopic technologies in the surgical treatment of perforated ulcers.
59. 61. Complications in the early postoperative period when performing surgical interventions for perforated ulcers.
60. Features of management of patients with perforated ulcer in the early and late postoperative period.
61. Complications in the late postoperative period during surgical interventions for perforated ulcers.
62. Etiology and pathogenesis of ulcerative hemorrhage. Classification of ulcerative hemorrhages.
63. Methods of examination of patients with ulcerative hemorrhage. Clinic of ulcerative bleeding.
64. Differential diagnosis of ulcerative hemorrhage.
65. Features of the course of ulcerative bleeding depending on the degree of its activity.
66. Features of the clinical course of active bleeding. Treatment of ulcerative hemorrhage.
67. Features of the clinical course of ulcerated bleeding that has stopped.
68. The choice of method of stopping bleeding depending on the degree of its activity.
69. Indications for conservative treatment of ulcerative hemorrhage.
70. Methods of endoscopic hemostasis and indications for their use.
71. Methods of surgical interventions for ulcerative hemorrhage.
72. The choice of method of surgical intervention depending on the patient's condition, the intensity of bleeding, the degree of blood loss, the location of the ulcer.
73. Features of the technique of surgical interventions for ulcerative hemorrhage.
74. Complications in the early postoperative period when performing surgery for ulcerative hemorrhage.
75. Treatment of complications in the early postoperative period during surgery for ulcerative hemorrhage.

76. Features of management of patients with ulcerative bleeding in the early and late postoperative period.
77. Complications in the late postoperative period during surgery for perforated ulcers.
78. Treatment of complications in the late postoperative period during surgery for perforated ulcers.
79. Bleeding from varicose veins of the esophagus. Diagnostic and treatment tactics.
80. Anatomical and physiological information about the intestine.
81. Definition of the concept of intestinal obstruction. Etiology of intestinal obstruction.
82. Modern issues of pathogenesis of intestinal obstruction.
83. Classification of intestinal obstruction.
84. Causes of dynamic intestinal obstruction. Clinic of dynamic impassability.
85. Treatment of dynamic (functional) intestinal obstruction.
86. Types of mechanical intestinal obstruction. Obstetric obstruction clinic.
87. Features of the clinic of strangulation intestinal obstruction.
88. Features of the clinic of torsion of individual organs of the digestive tract.
89. Features of the intussusception clinic. Types of intussusception.
90. Features of treatment tactics depending on the time of onset of the disease.
91. Joint disease. Etiology of connective tissue disease. Aspects of the pathogenesis of connective tissue disease.
92. Clinical picture of communicable disease. Methods of diagnosis of intestinal obstruction
93. Differential diagnosis of intestinal obstruction.
94. Differential diagnosis of certain types of intestinal obstruction.
95. X-ray and sonographic signs of acute intestinal obstruction.
96. Modern treatment program for intestinal obstruction.
97. Preoperative preparation of patients with acute intestinal obstruction.
98. The nature of surgical interventions for different types and levels of intestinal obstruction. Postoperative treatment program.
99. Prevention and prognosis in patients with acute intestinal obstruction.
100. Anatomical and functional information about the parietal and visceral peritoneum.
101. Etiology and pathogenesis of acute peritonitis. Classification of acute peritonitis.
102. Methods of examination of patients with acute peritonitis.
103. Clinical signs of local peritonitis. Clinical signs of widespread peritonitis.
104. Differential diagnosis of acute peritonitis. Complications of acute peritonitis.
105. Diagnostic program in a patient with acute peritonitis.
106. Treatment tactics in a patient with acute local peritonitis.
107. Treatment tactics in a patient with acute widespread peritonitis.
108. Features of the clinical picture of acute peritonitis in the presence of concomitant pathology.
109. Treatment tactics for acute peritonitis.
110. Features of preoperative preparation at acute peritonitis.
111. Methods of surgical interventions for peritonitis depending on the spread of the inflammatory process in the abdominal cavity.
112. Indications for minimally invasive methods of treatment of patients with acute peritonitis.
113. Stages of surgery for acute peritonitis.
114. Postoperative complications of acute peritonitis, diagnosis, prevention, treatment.

115. Management of patients in the postoperative period.
116. Definition of the concept of hernia. Causes of hernia. General symptoms of hernia.
117. The value of the shape and size of the hernia for the disease. Classification of external abdominal wall hernias. Complications of hernias.
118. Hernias of the white line of the abdomen. Clinic, classification, diagnosis, differential diagnosis, treatment.
119. Umbilical hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
120. Oblique inguinal hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
121. Direct inguinal hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
122. Postoperative hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
123. Femoral hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
124. Incarcerated hernias. A typical clinic. Clinical types of pinching. Diagnosis, differential diagnosis.
125. Surgical tactics for pinched hernia. Signs of viability and non-viability of the intestine.
126. Features of surgery for pinched hernia.
127. Inflammation of the hernia. Clinic. Differential diagnosis. Surgical tactics.
128. Damage (trauma) of a hernia. Clinic. Surgical tactics.
129. Intestinal obstruction in the hernia. Surgical tactics.
130. Incurable case. Clinic, diagnostics, differential diagnosis. Treatment.
131. Modern principles and methods of surgical treatment of hernias. Prevention of hernias.
132. Internal hernias. Clinic. Classification. Diagnosis.
133. Give a modern definition of peptic ulcer of the stomach and duodenum.
134. What are the factors of aggression in the development of peptic ulcer disease?
135. What are the factors protecting the gastric mucosa?
136. Anatomical areas of the stomach. Blood supply to the stomach.
137. What is the effect on the stomach of the vagus nerve, sympathetic innervation.
138. Complications of peptic ulcer of the stomach and duodenum.
139. Features of a pain syndrome at gastric localization of an ulcer.
140. Features of a pain syndrome at duodenal localization of an ulcer.
141. Clinical signs of gastric and duodenal ulcers.
142. Diagnostic program for peptic ulcer of the stomach and duodenum?
143. Differential diagnosis of peptic ulcer of the stomach and duodenum?
144. What are the complaints of patients in the presence of an obstacle at the level of the original stomach?
145. What are the complaints of patients in the presence of an obstacle at the level of the distal part of the duodenum?
146. Determination of pyloroduodenal stenosis. The reasons for its development.
147. Classification of pyloroduodenal stenosis. Principles of stenosis treatment.
148. Complaints of compensated, subcompensated, decompensated stenosis?
149. Clinical signs of subcompensated and decompensated pyloroduodenal stenosis.
150. Radiological signs of the degree of pyloroduodenal stenosis.



151. Indications for surgical treatment of gastric and duodenal ulcers.
152. Methods of operations for the localization of ulcers in the duodenum, stomach.
153. Peptic ulcer of the anastomosis. Causes of peptic ulcer anastomosis
154. Complaints of patients with peptic ulcer anastomosis. Objective clinical signs.
155. Diagnostic program for peptic ulcer anastomosis.
156. What diseases should be diagnosed with peptic ulcer anastomosis?
157. What drug treatment is used for peptic ulcer anastomosis?
158. What is the scope of surgery for peptic ulcer anastomosis?
159. Definition of Mallory-Weiss syndrome. Complaints of patients with Mallory-Weiss syndrome.
160. Objective manifestations of Mallory-Weiss syndrome.
161. Research methods to clarify the diagnosis of Mallory-Weiss syndrome.
162. Differential diagnosis of Mylory-Weiss syndrome.
163. Therapeutic tactics for Mallory-Weiss syndrome.
164. What are the indications for surgical treatment of Mallory-Weiss syndrome?
165. Abdominal compartment syndrome. Etiology, pathogenesis, clinic, diagnosis, treatment.
166. Relaparotomy in the treatment of disseminated peritonitis. Indication. Features of execution.
167. Phlegmon of the stomach. Clinic. Diagnosis. Treatment.
168. Laparostomy in the treatment of disseminated peritonitis. Reasons. Features of execution.
169. Diseases of the spleen. Anatomical and functional information about the spleen. Classification. Diagnostic methods.
170. Cysts of the spleen. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment.
171. Damage to the spleen. Clinic. Diagnosis. Treatment.
172. Spleen infarction. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Forecast.
173. Liver disease. Classification. Modern diagnostic methods.
174. Liver fibrosis. Etiology. Pathogenesis. Clinic. Diagnosis.
175. Cirrhosis of the liver. Etiology. Pathogenesis. Classification. Clinic. Diagnosis.
176. Malabsorption syndrome. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment.
177. Maldigestive syndrome. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment.
178. Open and closed injuries of the stomach, duodenum. Clinic. Diagnosis. Treatment.
179. Nonspecific ulcerative colitis. Etiology. Pathogenesis. Clinic. Therapeutic tactics.
180. Crohn's disease. Etiology. Pathogenesis. Classification. Therapeutic tactics.
181. Diverticular bowel disease. Etiology. Pathogenesis. Classification. Diagnosis.
182. Acute hemorrhoids. Classification. Etiology. Pathogenesis. Diagnostic methods.
183. Acute paraproctitis. Etiopathogenesis. Clinic. Diagnosis.
184. Hemorrhoids. Classification. Methods of conservative and operative treatment.
185. Anal fissure. Etiology. Pathogenesis. Clinic. Diagnosis. Therapeutic tactics.
186. Diseases of the soft tissues of the perineum. Classification. Methods of diagnosis and treatment.



## **The list of practical skills required for the final module control and semester final assessment:**

- Carry out a physical examination of the abdominal organs.
- Formulate and justify the diagnosis.
- Justify the necessary treatment tactics.
- Examination of a surgical patient: features and methods of history taking. Make a plan for examination of patients. Establish a clinical diagnosis.
- Execution of a medical card of an inpatient, an extract from the medical card of an inpatient, a letter of incapacity for work, a letter of intent to LTEK, a sanatorium card, an emergency report of an infectious disease, a report of a patient with a malignant tumor.
- Methods of examination of the patient: examination of lymph nodes (cervical, axillary, inguinal), peripheral arteries and veins.
- Methods of examination of the colon.
- Methods of gastric examination.
- Methods of examination of the liver, spleen.
- Methods of examination of patients with hernias.
- Method of setting a siphon enema.
- Preparation of patients for planned and urgent operations. Premedication.
- Interpretation of clinical blood and urine tests.
- Interpretation of biochemical blood tests: bilirubin, its fractions; urea, nitrogen, creatinine; blood proteins, acid-base state, blood electrolytes, coagulogram, urea.
- Reading of radiographs: review radiography of abdominal organs, chest radiography (pneumothorax, hydro - or hemothorax).
- Reading radiographs: X-ray examination of the esophagus and stomach, colon and small intestine.
- Finger examination of the rectum.
- Removal of sutures from the postoperative wound.
- Gastric lavage.
- Have an idea of the purpose of surgical instruments: surgical needles (cutting, prickly, atraumatic), needle holders, hemostatic clamps (soft straight, curved pulmonary), wound dilators, abdominal retractors, intestinal pulp (straight and curved, scissors, scales), devices for imposing anastomoses, devices for suturing of intestines.

### **Teaching methods**

1. **Verbal** (lecture, explanation, declamation, dialogue, tutorial);
2. **Visual** (illustration, demonstration);
3. **Practical** (practice at the departments).

### **Control methods.**

Various control methods are used at the department to effectively and objectively check the level of students' acquisition of knowledge, skills and abilities in the academic discipline. The most common of these are: oral examination, written and test control, practical examination, as well as various methods of self-control and self- assessment

### **The form of final control of academic performance.**

The form of final control of students' success at the Department of Surgery №1 is a semester final certification (SFC).

The final attestation is carried out exclusively in the credit-attestation week according to the schedule developed and brought to the notice of departments and students not later than a month before the beginning of the credit-attestation week. Students who are allowed to take the semester final attestation at the Department of Surgery №1:

- were present at all practical classes and lectures, or worked out the missed classes in the prescribed order;
- have a positive assessment for writing and reporting the educational medical case;
- have a current assessment, not lower than the minimum convertible amount of points of current study activity - 72 points;
- have in the individual curriculum (record book) a mark of admission to the exams.

The exam is taken by examiners who are approved by order of the rector. During the exam, each student must answer two theoretical questions, respectively two modules or topics, submitted for independent extracurricular study, and solve a situational problem with three questions. For the answer to each question, the examiner gives a grade on a four-point scale, and then from the five grades calculates the average grade for the exam. Criteria for assessing the level of knowledge of students are similar to the criteria for current study activity.

The result of the student's examination is recorded in the "Student progress in the discipline" and sealed with the signatures of the examiner and the head of the department. Then the results of the exam are announced to students. To obtain a student's grade in the relevant discipline, deans enter points for the current performance and the exam in the "Contingent" system and the average score in the discipline is ranked. After the department receives from the dean's office the protocol of relative ranking of the discipline by the teacher who last taught in this academic group of students, enters a grade for the whole discipline (scores, ESTC category, traditional grade), signed by the teacher and examiner and returned to the student. The final grade in the discipline is given only to students who have passed all modules in the discipline.

The results of the SFC in the discipline affect the calculation and determination of the amount of the scholarship and the determination of the student's rating.

Re-taking the exam is allowed no more than twice. Students who do not retake the exam on time are subject to expulsion from among the students of the academy.

### **The system of continuous and final control.**

Scientific and pedagogical workers carry out current control during practical classes. The main purpose of the current control is to provide feedback between the researcher and the applicant in higher education in the learning process and the formation of learning motivation of higher education. The information obtained during the current control is used both by the researcher and pedagogical worker - to adjust technologies, methods and teaching aids, and by applicants for higher education - to plan the independent work. Ongoing control can take the form of an interview, solving situational problems, assessing the performance of manipulations, written control, written or software computer testing in practical classes, assessing the performances of higher education students in discussions, dialogues, etc. With the beginning of teaching the discipline, scientific-pedagogical

(pedagogical) employee must bring to the attention of higher education students the requirements for the current control of knowledge. The teacher must assess the success of each student in each class on a four-point (traditional) scale, taking into account the standardized, generalized criteria for assessing the knowledge of higher education (Table 1). Assessment of success is integrated (all types of work of the applicant are evaluated, both in preparation for the lesson and during the lesson) according to the criteria that are communicated to applicants for higher education at the beginning of the study of the discipline. The grade is given by the teacher in the "Journal of attendance and student performance" and synchronously in the "Electronic Journal of PSMU" (hereinafter EJ) at the end of the lesson or after checking individual tests (written work, solving typical or situational problems and tests), but not later than 2 calendar days after the lesson (in accordance with the "Regulations on the electronic journal of attainment").

Tab. 1.

***Standardized general criteria for assessing the knowledge of higher education applicants***

By 4-grade scale	Grade of ECTS	Criteria
5 (excellent)	A	The student shows special creative abilities, is able to acquire knowledge independently, without the help of the teacher finds and processes the necessary information, is able to use the acquired knowledge and skills for decision-making in unusual situations, convincingly argues answers, independently reveals own talents and inclinations, possesses not less than
4 (good)	B	The student is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standardized situations, independently corrects errors, the number of which is insignificant, has at least 85% knowledge of the topic
	C	The student is able to compare, summarize, systematize information under the guidance of a research and teaching staff, in general, independently apply it in practice, control their own activities; to correct mistakes, among which there are significant ones, to choose arguments to confirm opinions, has at least 75% of knowledge on the topic both during the
3 (satisfactorily)	D	The student reproduces a significant part of the theoretical material, shows knowledge and understanding of the basic provisions with the help of research and teaching staff can analyze educational material, correct errors, among which there is a significant number of significant, has at least 65%
	E	The student has the educational material at a level higher than the initial, a significant part of it reproduces at the reproductive level. has at least 60%

2 (unsatisfactory)	FX	The student has the material at the level of individual fragments that make up a small part of the material, has less than 60% knowledge of the topic both during
	F	The student has the material at the level of elementary recognition and reproduction of individual facts, elements, has less than 60% knowledge of the topic as

The maximum number of points assigned to students when mastering each module (ECTS credit) - 200. The minimum number of points that students receive for current performance - 72. The teacher enters the points after their conversion from the average score according to table 2.

Tab. 2.

***Unified table of correspondence of scores for current performance, scores for TMC, exam, and traditional four-point score.***

Final exam, and traditional, four point score.					
Average score for current performance (A)	Points for current success in the module (A * 24)	Points for PMKwith module	Points for the module and / or exam (A * 24 + A * 16)	ECTS category	By 4-point scale
2	48	32	80	F FX	2 unsatisfactory
2,1	50	34	84		
2,15	52	34	86		
2,2	53	35	88		
2,25	54	36	90		
2,3	55	37	92		
2,35	56	38	94		
2,4	58	38	96		
2,45	59	39	98		
2,5	60	40	100		
2,55	61	41	102		
2,6	62	42	104		
2,65	64	42	106		
2,7	65	43	108		
2,75	66	44	110		
2,8	67	45	112		
2,85	68	46	114		
2,9	70	46	116		
2,95	71	47	118		
3	72	50	122	E	3 satisfactorily
3,05	73	50	123		
3,1	74	50	124		
3,15	76	50	126		
3,2	77	51	128		
3,25	78	52	130		

3,3	79	53	132	<b>D</b>	
3,35	80	54	134		
3,4	82	54	136		
3,45	83	55	138		
3,5	84	56	140	<b>C</b>	
3,55	85	57	142		
3,6	86	58	144		
3,65	88	58	146		
3,7	89	59	148		
3,75	90	60	150		
3,8	91	61	152		
3,85	92	62	154		
3,9	94	62	156		
3,95	95	63	158		
4	96	64	160		
4,05	97	65	162		
4,1	98	66	164		
4,15	100	66	166		
4,2	101	67	168	<b>B</b>	4 good
4,25	102	68	170		
4,3	103	69	172		
4,35	104	70	174		
4,4	106	70	176		
4,45	107	71	178		
4,5	108	72	180		
4,55	109	73	182		
4,6	110	74	184		
4,65	112	74	186		
4,7	113	75	188	<b>A</b>	5 excellent
4,75	114	76	190		
4,8	115	77	192		
4,85	116	78	194		
4,9	118	78	196		
4,95	119	79	198		
5	120	80	200		

Applicants take the semester exam during the examination session provided by the curriculum. It is held according to a separate schedule, which is approved by the first vice-rector for scientific and pedagogical work.

The time of self-preparation of higher education students for the exam is not less than 2 days (before the first stage of UDCE - 3 days, each component of the second stage of UDCE and final certification - 5 days).

Before each exam, the department must organize consultations. The schedule of pre-examination consultations, time and place of the examination the department informs the applicants for higher education not later than 2 weeks before the examination session. Applicants for higher education are admitted to the exam, who do not have unfulfilled missed classes, scored a minimum of at least 72 (which corresponds to an average score of 3.0 for current performance), passed all FMCs in the discipline (except the last and met all

educational requirements). disciplines that are provided by the working curriculum in the discipline: protection of medical history, positive assessments of meaningful modules, admission to the FMC in the form of test control, etc.), fulfilled financial obligations under agreements (for study, dormitory, etc.), which was marked in the individual curriculum for admission to the session by the dean (deputy dean) of the faculty.

Semester exams in PSMU are accepted by a commission, in accordance with the "Regulations on the examination commission". Examinations are open and public. Grades obtained during the examination by the attested persons are set out in the "Statement of final semester control" and in the individual plans of students.

The examination card contains two specific basic theoretical questions (one for each content module) and a practice-oriented situational task that corresponds to the nosology studied during the year, formulated in such a way that the reference response of the higher education student to each lasts up to 3-5 minutes. The questions should cover the most important sections of the working curriculum, which are sufficiently covered in the literature sources recommended as the main (basic) in the study of the discipline. Each question of the examination ticket is evaluated in the range of 0-20 points, the situational task contains two questions, which are usually devoted to the diagnosis and treatment of this pathology. Each of these questions is rated from 0 to 20 points.

As a result of passing the exam, the student is given a total grade from 0 to 80 points, the conversion of points into the traditional grade is not carried out.

In case of violation by the applicant of higher education of the rules of academic integrity (p.2.2.5. Rules of Procedure) during the preparation of the FMC, the results are canceled, the student is given a grade of "unsatisfactory".

In case of disagreement of the higher education applicant with the grade obtained for the exam, the higher education applicant has the right to file an appeal (in accordance with the "Regulations on the appeal of the results of final control of knowledge of higher education applicants").

Applicants for higher education who during the study of the discipline in which the exam is conducted, disciplines (except for CTE and UDCE components) had an average score of current performance from 4.50 to 5.0 are exempt from the exam and automatically (by consent) receive a final grade, respectively to the unified table of correspondence of points for the current success of the scores on the PMK, the exam, and the traditional four-point score, with the presence of the student at the exam is mandatory. In case of disagreement with the assessment, the specified category of applicants for higher education takes the exam according to the general rules.

The applicant of higher education has the right to retake the exam no more than 2 times and only during the examination session. In exceptional cases, additional re-examination may be carried out with the personal permission of the rector or the first vice-rector for scientific and pedagogical work. Permission to retake the exam is issued by the dean, director of the institute (or his deputy) in the form of "Personal statement of retaking the final control", which the student receives in the dean's office under a personal signature upon presentation of an individual curriculum. When organizing the retake of the exam by a group of applicants for higher education, a general statement is used.

The result of retaking the exam is certified by the signatures of all members of the commission in the test-examination statement.

## **Methodological support**

Classes at the department are provided with the following methodological documentation: working curriculum for the discipline; thematic plans of lectures, practical classes, independent classroom and extracurricular work; methodical instructions for independent work of students during preparation for practical employment and at employment; methodical developments, texts, abstracts of lectures; sets of test tasks from the database of the license exam "KROK-2", sets of tests and situational tasks to determine the initial and final level of knowledge of students, textbooks and manuals on surgery, videos.

## **Literature:**

### **Basic**

1. Surgery : [textbook for students of higher medical educational institutions of Ministry of Health of Ukraine] / ed. Ya. S. Bereznyts'kyi, M. P. Zakharash, V. G. Mishalov ; K. M. Amosova, Ya. S. Bereznyts'kyi, A. O. Burka [et al.]. – 2nd ed. – Vinnytsia : Nova Knyha, **2018**. – 711 p.
2. Urgent abdominal surgery : [навчальний посібник для студентів мед. ф-тів. закладів вищої мед. освіти, які навч. англ. мовою] / V. I. Liakhovskyi, I. I. Nemchenko, O. M. Liulka [at al.]; під ред. В. І. Ляховського ; Ministry of healthcare of Ukraine, PSMU, Department of surgery № 1. – Poltava : Астроя, 2020. – 163 p.

### **Additional**

1. General surgery : [textbook for students of higher educational institutions] : пер. з укр. / ed. Ya. S. Bereznytsky, M. P. Zakharash, V. G. Mishalov, V. O. Shidlovsky ; V. P. Andriushchenko, Ya. S. Bereznytsky, A. V. Verba [et al.]. – Vinnytsia : Nova Knyha, 2019. – 327 p.
2. Surgery : [textbook for students of higher medical educational institutions of Ministry of Health of Ukraine] / ed. Ya. S. Bereznyts'kyi, M. P. Zakharash, V. G. Mishalov ; K. M. Amosova, Ya. S. Bereznyts'kyi, A. O. Burka [et al.]. – Vinnytsia : Nova Knyha, 2016. – 711 p.

### **Information resources**

<https://www.amazon.com/Gale-Encyclopedia-Surgery-Patients-Caregivers/dp/0787691232>  
<https://oxfordmedicine.com/view/10.1093/med/9780199699476.001.0001/med-9780199699476>  
<https://www.springer.com/gp/book/9781588295545>  
<https://www.springer.com/gp/book/9781846282119>  
<https://flylib.com/books/en/3.98.1.5/1/>

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