BISHKEK INTERNATIONAL MEDICAL INSTITUTE | GENERAL MEDICINE

APPROVED
EMD decision
"15" 11 2021
Protocol No. 6
Chairman of the EMC - Vice-Rector,
candidate of pedagogical sciences,
associate professor Apezova D.U.

SYLLABUS
by discipline

B.6.4. SURGERY

For students of the educational program, higher professional education in the specialty 560001 "General Medicine" (5-year education) in the specialty "Doctor"

Type of study work	**Total hours**
course	5
Semester	10
Number of weeks	18
The total complexity of the discipline	1
Classroom/practical studies (PS)	30
Student Independent Work (SIW)	
Forms of control	
current control	Testing, oral questioning, written test
Frontier control	Testing
Midterm	Testing
Final control	exam
Semester rating by discipline:	Point-rating system

Information about the teacher of the academic discipline

Full Name	
Job title	Teacher
Academic degree	
Academic title	
Email address	
Location of the department (address)	KR, Bishkek, st. Shabdan Baatyr 128, floor 2, room 6
Telephone	
Consultation hours	11.00-13.30

Characteristics of the academic discipline

The purpose of studying the discipline. The subject of the study of "Surgery" - is the diagnosis of surgical diseases, methods of treatment and medical rehabilitation of patients in outpatient settings. When studying the course "Outpatient surgery", students master the issues of organization and provision of surgical care at the outpatient stage, knowledge of the current state of the theory and practice of outpatient surgery, improvement of skills and skills of diagnosis, treatment and prevention of surgical diseases. They gain knowledge of modern issues of organization of outpatient care to the population. They study the legal and

legislative bases of the activity of a polyclinic surgeon. They get acquainted with the organization of the work of the surgical department of a polyclinic, a day surgical hospital or an outpatient surgery center.
Modern principles of diagnosis, differential diagnosis and the choice of surgical tactics at the outpatient stage are studied. During the training, the results of laboratory and instrumental research methods are interpreted. By the end of the training, students can participate in providing assistance for emergency surgical conditions. Perform operations and medical manipulations in a polyclinic and a day surgical hospital in full, including using minimally invasive techniques. To carry out rehabilitation measures after surgical diseases and surgical interventions. Perform examinations of temporary and permanent disability of a surgical patient. To organize the medical examination of surgical patients. To carry out the prevention of surgical diseases.

Prerequisites of the discipline:

- Fundamentals of clinical examinations in internal diseases
- Fundamentals of clinical examinations in pediatrics
- Anesthesiology, intensive care, emergency conditions
- Family medicine
- Neurology with the basics of neurosurgery
- Forensic medicine with jurisprudence
- Infectious diseases
- General physiotherapy, VC and physical therapy
- Disaster Medicine
- Therapy
- Pediatrics

Postrequisites of the discipline:

- Obstetrics and gynecology

Learning outcomes of the discipline according to the RO GPP

The study of the discipline microbiology, virology and immunology will contribute to the achievement of learning outcomes (RE) GEP:
RE-7 - Apply deductive thinking in solving clinical problems;
RE-12 - To develop and demonstrate the basics of appropriate management strategies (preventive, diagnostic and therapeutic) for acute and chronic conditions
Within the framework of this discipline, it is expected to achieve the following results of teaching the discipline, which are implemented within the framework of achieving competencies:
PC-16 - is able and ready to use the algorithm of diagnosis (main, concomitant, complications) taking into account the ICD, perform basic diagnostic measures to identify urgent and life-threatening conditions;
PC-17 - is capable and ready to perform basic therapeutic measures for the most common diseases and conditions in adults and children in outpatient and hospital settings;

Content of the discipline

№№	Name of topics
1.	Organization of the work of the surgical department, the operating unit, and the postoperative department.
2.	Aseptics and antiseptics.
3.	The concept of sepsis. Modern terminology, classification, etiopathogenesis, principles of diagnosis.
4.	Anaerobic infection. Classification, etiology, pathogenesis.
5.	Erysipelas. Etiology, classification, clinic, diagnosis, treatment, complications. The importance of hyperbaric oxygenation in the treatment of purulent complications.
6.	Principles of organization of blood transfusion
7.	A purulent wound. Phases of the course of the wound process. Regeneration
8.	Principles of the organization of care for burns
9.	Surgical sepsis. Definition of the concept. Causes of development. Pathogenesis. Pathogens. Principles of diagnosis, evaluation scales of severity and prognosis of the disease. Antibacterial therapy, detoxification. Extracorporeal detoxification methods.
10.	Abdominal injuries. Diagnostics. Special research methods.

11.	Methods of processing suture material, preparation of the surgeon's hands. Methods of sterilization of instruments, surgical underwear, dressing material. Biological methods of antiseptics
12.	Purulent diseases of the skin and subcutaneous tissue. Furuncle, carbuncle, hydradenite. Etiology, clinic.
13.	Carbuncle. Clinic, diagnosis, treatment.
14.	Perforated ulcer of the stomach and duodenum. Classification of perforations, pathological anatomy. Clinical picture. Diagnostics and differential diagnostics. Therapeutic tactics
15.	Shock in surgery (posthemorrhagic, traumatic). Etiology, pathogenesis, principles of treatment
16.	A specific surgical infection. Tetanus, anaerobic infection. Classification, etiology, pathogenesis, diagnosis, principles of treatment,
17.	Pulmonary hemorrhage Causes, clinic, diagnosis, modern tactics of treatment of patients.
18.	Local and general reactions of the body to purulent surgical infection
19.	Bleeding. Classification. Methods for determining blood loss. Compensation for blood loss.
20.	Pneumothorax. Reasons. Total and limited pneumothorax. Spontaneous, open, valvular and stressed pneumothorax Features of their development and clinical course. Diagnostics. First aid, treatment.
21.	Wounds. Classification. The doctrine of surgical infection. Microflora of the wounds. The course and healing of wounds. Treatment of wounds. Primary surgical treatment of wounds, indications and techniques.
22.	Coronary heart disease. Methods of surgical treatment (coronary artery bypass grafting), indications for it. Postinfarction heart aneurysm. Diagnostics. Indications and contraindications to surgery. Principles of surgical treatment.
23.	Anesthesiological and resuscitation support in emergency and elective surgery. Assessment of the severity of the patients' condition. Central vein catheterization
24.	Dynamic intestinal obstruction. Ethnology, pathogenesis. Clinic, differential diagnosis. Principles of treatment.
25.	Acute appendicitis. Classification. Pathoanatomic forms. Etiology, pathogenesis. Clinic and diagnostics. Treatment
26.	Tetanus. The pathogen. Pathogenesis and pathological anatomy. Clinic, diagnosis, treatment, prevention.
27.	General issues of intensive care in surgical practice. Shock – definition of the concept, classification, stages. Traumatic shock. Hemorrhagic shock. Septic shock. Anaphylactic shock. Principles of treatment of various types of shock, prevention of shock development. Prevention and treatment of postoperative complications
28.	Perforation of a stomach ulcer. Pathogenesis. Clinical picture. Diagnostic methods. Indications for surgical treatment and types of operations.
29.	Peritonitis. Classification. Clinic, diagnostics, differential diagnostics.
30.	Types of acute disorders of mesenteric circulation (embolism, arterial thrombosis, non-exclusive disorders of mesenteric circulation, venous thrombosis). The main mechanisms of the pathogenesis of the disease. Symptoms, clinic and course. Stages of the disease. Diagnostics. Treatment: methods of surgical interventions; types of operations. And
31.	Strangulation intestinal obstruction. Definition of the concept. Classification for etiological reasons Clinic of various types of strangulation intestinal obstruction. Diagnosis, differential diagnosis. Types of operations.
32.	Intestinal obstruction. Classification. Methods of research of patients. Preoperative preparation and management of the postoperative period in patients with acute intestinal obstruction. Fight against intoxication, intestinal paresis, water-electrolyte disorders
33.	Injury of large vessels. Bleeding, blood loss, medical care. Methods of temporary and final stopping of bleeding at the stages of medical care.
34.	Diseases of the operated stomach. Classification. Unhealed and recurrent ulcers, peptic ulcers of the jejunum, adductor loop syndrome and dumping syndrome.
35.	Abdominal injuries. Classification. Characteristics of open and closed damage

List of main and additional literature:

Main literature:

Rodoman G.E., General surgery: the main clinical syndromes / G.E. Rodoman, T.I. Shalaeva, I.R. Sumedi, T.E. Semenova, E.K. Naumov - M.: GEOTAR-Media, 2018

Additional literature:

1. Oleynikov P.N., Guide to outpatient surgical care/ edited by P. N. Oleynikov - M.: GEOTAR-Media, 2018.
2. Gostischev V. K., Clinical operative purulent surgery: a guide for / V. K. Gostischev - M.: GEOTAR-Media, 2016.
3. Pediatric surgery: textbook/ edited by Yu. F. Isakov, A. Y. Razumovsky; ed. by A. F. Dronov. - M.: GEOTAR-Media, 2016

Internet resources:

http://www.studmedlib.ru/
https://www.iprbookshop.ru/
http//www.edu.ru
http//www.medicina.ru
http //www.journals. uchicago.edu/JAD/home.html

Monitoring and evaluation of learning outcomes

The content of the rating system for assessing student performance

The rating assessment of students' knowledge in each academic discipline, regardless of its total labor intensity, is determined on a 100 (one hundred) - point scale and includes current, boundary, intermediate and final control.

The distribution of rating scores between types of control is established in the following ratio (according to the table of the score-rating system of assessments):

Form of control				
current (CC)*	boundary control (BC)**	mid-term exams (MC)***	Final /exam (FE)	Discipline Rating (RD)
0-100 points	0-100 points	0-100 points	0-100 points	0-100 points, with the translation of points into a letter designation

Note:

* ТК$(middle) = \frac{\sum_1^n \times point}{\sum_1^n}$, where n is the number of types of classroom and extracurricular work of students in the discipline;

**РК $(middle) = \frac{\sum_1^n credit \times point}{\sum_1^n credits}$, where n is the number of modules (credits) in the discipline;

***ПК $(middle) = \frac{\sum_1^n \times point}{\sum_1^n}$, where n is the number of intermediate controls (2 controls per semester: in the middle and at the end of the semester) by discipline;

****ИК – examination conducted at the end of the study of the discipline

;

*****РД = $\frac{\text{ТКср+РКср+ПКср+ИК}}{4}$, the final rating of the results of all types of control at the end of the discipline;

GPA= $\frac{\sum_1^n \times \text{балл}}{\sum_1^n}$ where, n is the number of disciplines in the semester (for the past period of study).

A student who has not passed the current, boundary and intermediate controls to the final control (exam) is not allowed.

The current control is carried out during the period of classroom and independent work of the student on time according to the schedule, at the end of the study of the discipline, the average score of the current control (CC) is calculated**.** *Forms of current control can be*:

- testing (written or computerized);
- performance of individual homework assignments, abstracts and essays;
- student's work in practical (seminar) classes;
- various types of colloquia (oral, written, combined, express, etc.);

- control of performance and verification of reporting on laboratory work;
- visiting lectures and practical (seminar, laboratory) classes;
- Incentive rating (up to 10 points).

Other forms of current monitoring of results are also possible, which are determined by the teachers of the department and recorded in the work program of the discipline.

The frontier control is carried out in order to determine the results of the student's development of one credit (module) as a whole. *Frontier control* should be carried out only in writing, at the end of the study of the discipline, the average score of boundary control (BC) is calculated. As forms *of frontier control* of the training module, you can use:

- testing (including computer testing);
- interview with written fixation of students' answers;
- test.

Other forms of intermediate control of results are also possible.

Intermediate control (mid-term exams) is carried out in order to check the completeness of knowledge and skills in the material in the middle and end of the semester (2 times per semester) of studying the discipline, by the end of the study of the discipline, the average score of intermediate control (PCsr) is calculated, *forms of intermediate control (mid-term exams) can be:*

- testing (including computer testing);
- interview with written fixation of students' answers;
- test.

Other forms of intermediate control of results are also possible.

The final control is carried out during the session, by conducting an exam, it can be carried out in the following forms:

- testing (including computer testing);
- written exam (ticketing system).

Correspondence of the point-rating system of assessments used by the institute and the assessments of the European system for the transfer of credit units, labor intensity (ECTS)

Grade						Criterion
System of letters	digital system	Traditional system	Points (%)	Scored points (max - 100)	Evaluation by discipline without an exam	
A	4	5	95-100	95-100	Credited/ passed	"Excellent" - deserves a student who has shown a deep, systematic and comprehensive knowledge of the educational material, who freely performs practical tasks, who has mastered the recommended basic and additional literature on the discipline
A-	3,67		90-94	90-94		"Excellent" - deserves a student who has shown a deep, systematic and comprehensive knowledge of the educational material, who freely performs practical tasks, who has mastered the recommended basic literature on the discipline, but is not familiar with additional literature
B+	3,33	4	85-89	70-89		"Good" - exhibited to a student who has shown a systematic and comprehensive knowledge of the educational material, able to independently replenish and update this knowledge in the course of training, performing practical tasks, familiar with the main literature on the discipline
B	3,0		80-84			"Good" is given to a student who has shown a systematic and comprehensive knowledge of the educational material, who is able to independently replenish this knowledge in the course of training, performing practical tasks, but not fully familiar with the main literature on the discipline
B-	2,67		75-79			"Good" - is given to a student who has shown the systematic nature of knowledge in the discipline, who is able to independently replenish this knowledge in the course of training, performing practical tasks, but not fully familiar with the main literature on the discipline
C+	2,33	3	70-74			"Satisfactory" - is given to a student who does not have a systematic nature of knowledge in the discipline, who is not capable of independently replenishing and updating knowledge in the course of further education, performing practical tasks with errors
C	2,0		65-69	50-69		"Satisfactory" - is given to a student who made mistakes in completing assignments, but who has the necessary knowledge to eliminate them under the guidance of a teacher

C-	1,67		60-64			"Satisfactory" - is set to a student who made errors in the performance of tasks, but who has the possible knowledge to eliminate them under the guidance of a teacher
D+	1,33		55-59			"Satisfactory" - is set to a student who made errors in the performance of tasks, who does not have the necessary knowledge to eliminate them
D-	1,0		50-54			Satisfactory" - is given to a student who has made significant errors in the performance of tasks, who does not have the necessary knowledge to eliminate them
FX	0,5	2	25-49	Less of 50	not credited/not passed	"Unsatisfactory" - is set to a student who has not completed the task, does not have the necessary knowledge to eliminate them
F	0		0-24			"Unsatisfactory" - is set to a student who has not completed the task, does not have the necessary knowledge to eliminate them, even under the guidance of a teacher

Academic achievement requirements:

Attendance by students of all classroom classes without delay is mandatory.
In case of absence, classes are worked out in the order established by the dean's office.
If there are three passes, the teacher has the right not to allow the student to attend classes until the issue is administratively resolved.
If the absence of classes is more than 20.0% of the total number of classes, the student automatically enters the summer semester.

Note to the student:

- ✓ regularly review lecture material;
- ✓ Do not be late and do not miss classes;
- ✓ work off missed classes if you have permission from the dean's office;
- ✓ Actively participate in the classroom (individually and in groups;)
- ✓ timely and fully complete homework assignments;
- ✓ submit all assignments within the time specified by the teacher;
- ✓ independently study the material in the library and at home;
- ✓ timely and accurately fulfill the tasks of the teacher, individual tasks for the IWS to achieve learning outcomes;
- ✓ to master the basic and additional literature necessary for the study of the discipline;
- ✓ performing tasks, the student should not copy or reproduce the work of other students, scientists, practitioners, plagiarism;
- ✓ develop their intellectual and oratory skills;

In case of non-compliance with the requirements of the Memo, the student will be penalized in the form of deducting points (one point for each violated item).

If the requirements of the Memo are fully met, the student is encouraged in the form of an additional 10 points to the final control in the discipline.

Academic Integrity, Conduct and Ethics Policy:

- turn off your cell phone during class;
- Be polite;
- respect other people's opinions;
- formulate objections in the correct form;
- do not shout or raise your voice in the audience;
- independently complete all semester assignments;
- Eliminate plagiarism from your practice;

Methodical instructions.

It is recommended to organize the time required to study the discipline as follows:
When preparing for a practical lesson, you must first read the abstract with the teacher's explanations.
When performing exercises, you must first understand what you want to do in the exercise, then proceed to its implementation.
Literature work. The theoretical material of the course becomes more understandable when books are studied in addition to the abstract. After studying the main topic, it is recommended to perform several exercises.

Preparation for boundary and intermediate controls. In preparation for the boundary and intermediate control, it is necessary to study the theory: the definitions of all concepts before understanding the material and independently do several exercises.

Independent work of students is organized on all studied topics of each section. Independent work is carried out in the form of:

- work in Internet sites;
- work with basic and additional literature;
- fulfillment of written assignments;
- preparation of reports, abstracts, tables and posters on