

MEDICAL UNIVERSITY - PLOVDIV

MEDICAL FACULTY

DEPARTMENT OF PROPEDEUTICS OF SURGICAL DISEASES - GENERAL SURGERY SECTION



ACADEMIC STANDARD FOR THE COURSE GENERAL SURGERY

1. Purpose of the discipline

The academic standard for the discipline "General Surgery" aims to acquire specialized knowledge and skills for the treatment by surgical methods of congenital and acquired diseases and injuries of the organs and systems of the human body. The main goal is students graduating in medicine to get acquainted with the theoretically applied achievements of modern science of surgical diseases - the patterns and mechanisms of their occurrence, development and manifestation, as well as the main methods of clinical research of surgical patients. In addition to studying the semiotics of surgical diseases, the aim of the training is to learn and perform the methodology of general and local examination of the surgical patient based on a detailed history, in-depth clinical examination, planning, performing and evaluating various paraclinical studies.

2. Learning content of the course

Training course: 3rd year

Semesters of study: V and VI semester

Exam: after the 6th semester

Classroom hours: 165 hours

Lecturer and : Prof. Dr. B. Hadzhiev, Prof. Dr. B. Sakakushev, Assoc. Prof. Dr. D. Chakarov

The training of students in propaedeutics of surgical diseases is carried out in accordance with the independently developed " **qualification characteristics of the student** ", referring to the most important priorities, goals and objectives of the training course.

CURRICULUM

Type of classes	Horarium				Credits
	per week	V sem.	VI sem.	Total	
Lectures	3/2	45	30	75	10.5
Practical exercises	4/2	60	30	90	
Total	7/4 hours	105 hours	60 hours	165 hours	

3. Assumptions - COMPULSORY COMPETENCIES IN THE DISCIPLINE OF PROPEDEUTICS OF SURGICAL DISEASES:

- Theoretical knowledge:
 - learning the technique and specificity of examination of the surgical patient
 - applying the achievements of the modern science of surgical diseases into practice the peculiarity of their occurrence, development and manifestation in signs, symptoms and syndromes and to apply current methods of clinical research on surgical patients
 - study of the semiotics of surgical diseases
 - construct the diagnosis of the surgical patient, based on the analysis of the established surgical symptoms and syndromes, combined with the most important clinical signs
- Practical skills:
 - mastering the methodology of the general and local physical examination of the surgical patient on the basis of a detailed anamnesis and in-depth clinical examination
 - performing and evaluating various paraclinical studies
 - performing basic surgical procedures - injections, catheterizations, placement of NG tubes, dressings, examination of blood groups
- Attitudes:
 - adequate treatment of the patients ensuring their safety

4. Academic resources

The development of the academic staff in the clinic is carried out according to the individual plans for academic development of each lecturer. They are in compliance with the law of higher education and staff development following the current priorities and trends in teaching medicine in undergraduate, postgraduate and CME, nationally and globally.

The teaching staff in the section "General Surgery" at the Chair of Propaedeutics of Surgical Diseases consist of: three (3) professors participating in the lecture course and eight (8) assistant professors, responsible for the practical exercises.

The staff uses different methods for feedback and control of students / **student questionnaire** / which are periodically analyzed and updated on chairs meetings.

5. Material resources

- TECHNICAL EQUIPMENT AND TOOLS USED IN THE TRAINING:

Teaching is performed on real patients in the ward, operating theatre and consultation rooms using surgical consumatives and equipment related to their treatment - needles, syringes, infusion systems, infusomats, aspiration systems, oxygen delivery systems, catheters, probes, drainages, dressings, test serums and blood transfusion sets, surgical instruments, operating equipment - tables, lamps, coagulators, etc.

First Clinic of Surgery at the University Hospital "St George" EAD has four modernly equipped classrooms for multimedia teaching and presentations for each practical, three led demonstration TVs, two desktop computers, one laptop, a storage of training videos on CD and flash drives, work with models, illustration boards, multimedia projector with folding presentation screen

6. Lecture training

The classic lecture method, which has proven itself in the 70-year history of our university, still remains a relevant and effective teaching tool. Group discussion and problem-based learning, which originated in the 60s in the United States, as alternatives to traditional lectures have not yet proven their benefits in our country.

Lectures are performed on real or remotely in a pandemic Kovid -19 conditions. In the process of preparing and presenting them teachers follow the principles of Mc Leish / 1976 / systematically, stimulating clinical thinking, the ability to clearly explain, commitment to patients and expert level of knowledge. The primary goal is to transform the teaching into a learning process.

The curriculum and topics of general surgery have been updated including issues like transplantology, minimally invasive surgery, modern pathogenesis and morphology of benign and malignant neoplasms.

7. Practical exercises

Practical exercises in surgery have traditionally been held at the patient's bedside for decades - an approach that has proven its advantages in teaching the fundamental clinical discipline of surgery compared to alternative teaching methods such as problem-based learning, brainstorming and more.

The target are third-year international and Bulgarian medical students and trainee doctors taught in Bulgarian and English language. Teaching in surgery also includes students from international mobility programs such as Erasmus and world student exchange, postgraduate and doctoral students in surgery, general practitioners and surgeon specialist.

Thematic patients admitted and /or operated in the clinic, methodical instructions, manuals and tests are provided for the practicals .

In accordance with the bedside work with the patients more "practical" training periods were introduced - traumatic diseases, examination of a patient with bleeding and instruments and dressings training as well as acquisition of technical skills for minor surgical procedures and attending operations. Very intriguing were the workshops organized in recent years for incisions and suturing and training on surgical models with video recording and analysis of the implementation of the techniques of incisions, tissue excisions, suturing and knot tying.

With the entry tests is checked the basic training of students for the upcoming practical exercise and the results (obtained knowledge and skills) from previous studies.

The teachers prepare on schedule multimedia presentations for each thematic unit from the program for practical exercises in surgery at the beginning of each semester.

8. Seminars:

With the seminar group exercises, conducted in the section twice during the semester, current control of the knowledge, skills and attitudes acquired so far is obtained. These serve for feedback and are effective stimulus for further training. Seminars go like discussion on a patient with a thorough surgical clinical examination, following the symptomatologic and syndromologic approach . The analysis and synthesis are presented by a student rapporteur , who defends his position and conclusion on the topic of the clinical case. Next is the conclusion

and a summary by the teacher, linking the final data from the clinical case with national and international guidelines and recommendations on the topic.

9. Information resources. Basic literature. Sites

Teachers of the section is so designed lectures and seminars on the subject, as can be to o become so in the same electronic format if desired.

The teacher draws up a list of recommended and literature discipline "General surgery" , including all the constituents hers t (lectures, exercises, projects).

List of recommended information sources:

- COURSE IN SURGERY - lecture notes, 2020 /2021
- Lynn Bickley. Bates' Guide to Physical Examination and History Taking Lippincott Williams & Wilkins 10th Edition ISBN: 9781609133597
- Townsend C., Beauchamp D. , Evers M. , Mattox K. Sabiston Textbook of Surgery The Biological Basis of Modern Surgical Practice.2016
- Brown C., Inaba K., Martin M., Salim A. Emergency General Surgery . A Practical Approach , 2018
- Docimo S. Jr. , Pauli E. Clinical Algorithms in General Surgery A Practical Guide.2019

10. MONITORING AND EVALUATION:

Current control:

- entry tests and colloquia according to the curriculum
- reporting and discussing clinical cases
- live demonstrations of examination methods
- demonstrations of surgical manipulations

Final control:

- entry test
- practical exam
- written exam/essay/ on topics from the syllabus

METHODS FOR KNOWLEDGE CONTROL: tests; case discussion; demonstrations of acquired skills

11.Independent work and student commitment

Independent work of the student is guided by the teacher (assistant) who plans, performs and contolls the individual students progress

12. Cooperation between students and teaching staff

This cooperation is expressed in:

- Commitment of the teacher to the student and his expertise in surgery and teaching for more oppotunities to achieve better results
- Use of reception hours for consultations and teaching /training rounds.
- Involvement of students in teams for research teams, projects, etc.

The clinic applies methods for teacher's control and feedback with students / **student questionnaire** /, the analysis of the results of which is subject to discussion and decision of clinical meetings.

13. Exams

The current grades provided for in the curriculum of the specialty are given for the results of the student from seminars and two written tests.

14. Evaluation standards:

Standards for assessing student's achievements objectively have eliminated the traditional oral exam with a comprehensive one consisting of an entry test, essay and practical exam,.

The student's assessment of the multicomponent final exam is as follows:

- **Excellent (6)** - thoroughly ruling key and additional knowledge and skills in surgery, meaningful and correct understanding of the subject, skills for solving complex clinical problems, rational clinical thinking and reasoning of decisions and knowledge of information sources,
- **Mn. good (5)** - for very well mastered key and additional knowledge, meaningful and correct understanding of the subject, skills for applying what has been learned in complex case studies.
- **Good (4)** - for mastered key and additional knowledge for solving cases and tasks, but without being able to develop them to independent thinking;
- **Intermediate (3)** - for acquired key knowledge and solutions to simple problems.
- **Weak (2)** - does not meet any of the above requirements.

At the beginning of the semester, students get acquainted with the assessment standards, the procedures for conducting ongoing control and the opportunities to receive feedback on their progress during the semester.

15. Final assessment

The final evaluation determine to what extent a student has achieved the goal of education. It includes :

- current control
- written final examination
- practical exam

K is seen to a weight (0 to 1) is - continuous assessment 0.2, written examination - 0.5, practical and oral - 0.3. The final score is obtained as the sum of the scores on a six-point scale of the various components multiplied by the respective significance factors.

- K1.Q1 assessment (s) of ongoing controls and ongoing assessments of controls;
- K2. Q2 grade from the final written exam / test and written exam /;
- K3.Q3 assessment from practical and final oral exam;

The final grade = $K1.Q1 + K2.Q2 + K3.Q3 = 1$

$k1 = 0.20$; $k2 = 0.50$; $k3 = 0.30$

If one of the components of the final mark is poor 2, then the final grade is necessarily poor 2.

The components involved in the assessment and the coefficients of significance for each discipline are determined by the Academic Council with the adoption of this academic standard of the discipline.

In a semestrial exam, students' written work is assessed anonymously.

The examination materials are stored and the students are given the opportunity to get acquainted with them and the grounds for assessment according to the order and procedure announced in advance.

The period in which students have access to the examination materials and results is not longer than 5 working days after the date of the examination.

Each discipline has a characteristic to which in this form the student is given access at the beginning of the study. This requirement is set in accordance with the Higher Education Act Art. 56. para. 1, "teachers are obliged to develop and publish in an appropriate manner and description of the lecture course conducted by them, including titles and sequence of topics from the curriculum, recommended reading, method of forming the assessment and form of testing knowledge and skills" .

The academic standard for academic discipline is approved by a Decision of the AC - Protocol and is published on the website of MU - Plovdiv.

This academic standard for the discipline of General Surgery was approved by the Department Meeting with a protocol on 31.01.2018.

Head of the Department of Propaedeutics of Surgical Diseases:

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