Odesa National Medical University
Department of Surgery No. 1 with postgraduate training

Syllabus
LAPAROSCOPIC SURGERY: ADVANTAGES AND RISKS

Amount	4 credits / 120 hours
Semester, year of study	4th semester, 2nd year of study
Days, time, place	According to with schedule in the audience departmentsurgery No. 1 with postgraduate training. St. Zabolotny, 26/32.
Teacher(s)	Grubnik Volodymyr Volodymyrovych, Doctor of Medicine, professor, Head of Department of Surgery No. 1 with postgraduate training
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Workplace	Office of the head of the department of surgery No. 1 with postgraduate training, str. Zabolotny, 26/32.
Consultations	*Face-to-face consultations*: Monday, Thursday - from 09.00 to 12.00; *Online consultations: upon agreement* *MicrosoftTeams*or via Telegram/Viber

COMMUNICATION

Communication with graduate students is carried out through face-to-face meetings. In case of transition to distance learning, communication with graduate students will be carried out using e-mail and programs: Microsoft Teams, Moodle, Telegram and Viber.

COURSE ABSTRACT

Subject of discipline study

The subject of study of the selective educational discipline "Laparoscopic surgery: advantages and risks" is methods of treatment of patients with surgical pathology using laparoscopic techniques, indications and contraindications for laparoscopic interventions, methods of implementation, possible difficulties and complications.

Course prerequisites and post-requisites (The place of the discipline in the educational program)

The study of the educational discipline "Laparoscopic surgery: advantages and risks"

is based on the students' study of normal, pathological and topographical anatomy, histology, cytology and embryology, general and clinical pathological physiology, general surgery, operative surgery, the course of surgical diseases, propaedeutics of internal diseases and therapy. which involves integration with these disciplines and forming the ability to apply knowledge in the process of further education and professional activity.

The purpose of the course

The purpose of the study is the in-depth mastery of issues of laparoscopic surgery for the qualitative performance of scientific research and the formation of skills and abilities in teaching the discipline.

Tasks of the discipline:

1)to getin-depth knowledge of laparoscopic surgery;
2)to study in depth the possible signs of surgical diseases during laparoscopy;
3)to acquire the skills ofappreciation of the possibility of laparoscopic surgical interventions in surgical practice;
4)to gain in-depth knowledge aboutpossible complications when performing laparoscopic surgical interventions and methods of their detection and elimination;
5)mastering experimental techniques and modern methods of clinical research in surgery;
6)practicing the skills and abilities of analyzing the results of clinical studies;
7) Master the basic principles of performing video endoscopic surgical interventions.
8) master the ability to organize and conduct educational classes from the elective course;
9) acquisition of skills and abilities in educational, methodical and educational work;
10) acquire skills in using modern information technologies in teachingsurgery in general and a course on the choice of surgical diseases.

Expected results

According to the results of studying the discipline, graduate students should

know:

modern classifications of surgical diseases, possibilities of diagnosis and main ways of treatment of surgical diseases;basic principles of performing laparoscopic surgical interventions; modern approaches and methods for conducting interdisciplinary scientific research, the theory of the cognitive process and the technology of the pedagogical process; modern achievements in the field of scientific research.

be able:

- Conduct research on selected topics;
- Interpret the results of modern research methods obtained;
- Conduct critical analysis of clinical data;
- Use modern achievements of science and technology when conducting diagnostic research and determining the purpose and tasks of scientific research;
- Formulate a scientific task - a problem;
- Develop research design; to be able to choose research methods that are adequate to the set goal and tasks;
- Conduct original scientific research;
- Receive and interpret new scientific facts that expand the scope of knowledge in the researched problem;

- Conduct training sessions and practical consultations;
- Carry out educational and methodical work;
- To implement the achievements of science and technology in pedagogical practice;
- To develop communications in the professional environment and the public sphere for the dissemination of scientific facts in the social sector;
- To promote technological, social and cultural progress in an academic and professional context

Practical experience

1 Basics of preparing laparoscopic equipment for surgery.
2 Applying pneumoperitoneum using a Veresh needle.
3 Imposition of pneumoperitoneum using a Hasson trocar.
4 Manipulation of laparoscopic clamps.
5 Separation of tissues using scissors and electrocoagulation.
6 Tying intracorporeal knots.
7 Tying extracorporeal knots.
8 Suturing using laparoscopic instruments.
9 Examination of the abdominal cavity using a laparoscope.
10 Manipulation of laparoscopic clamps, scissors and coagulation.
11 Laparoscopic cholecystectomy.
12 Laparoscopic appendectomy.

COURSE DESCRIPTION

Forms and methods of education

The course is taught in the form of seminar classes (60 hours), as well as through the organization of independent work of graduate students (60 hours); total - 120 hours (4 credits).

Teaching methods

the training of graduate students involves the use of interactive learning methods with an emphasis on practicing practical skills and the ability to use the acquired knowledge of laparoscopic surgery. In addition, the use of distance learning is foreseen - with the involvement of graduate students in internationally recognized courses and educational resources.

*Final control*is not conducted, the study of the discipline ends with a credit at the last practical lesson.

Content of the academic discipline

Names of content modules and topics	Number of hours		
	Full-time		
	everything	including	
		Practical training	Individual work
Content module 1. Theoretical training and pedagogical practice			
Together	4	4	2
Content module 2. Educational and methodical work			
Methodical meetings of	4		2

the department			
Content module 3. Laparoscopic surgery			
	112	**56**	**56**
Together	120	60	60

3. Topics of seminars and independent classes of the selective educational discipline "Laparoscopic surgery: advantages and risks."

No s/p	Topic	Practical training	Individual work
1.	Fundamentals of laparoscopic technique	1	1
2.	History of laparoscopy. Differences from "open" operative interventions. Pros and cons.	1	1
3.	Laparoscopic equipment and instruments.	1	1
4.	Methods of applying pneumoperitoneum and introducing trocars.	1	1
5.	Manipulation of laparoscopic instruments.	1	1
6.	Methods of connecting tissues and ligation of vessels in laparoscopy.	1	1
7.	Practice session. Practicing manual skills of working with laparoscopic instruments.	1	1
8.	Diagnostic laparoscopy,	1	1
9.	Indications for diagnostic laparoscopy, performance technique, laparoscopic picture of the main pathological processes.	2	2
10.	Laparoscopic surgical interventions in the pathology of abdominal organs	1	1
11.	Laparoscopic fundoplication: indications, examination plan, types of technique	2	2
12.	Laparoscopic fundoplication: postoperative complications, postoperative treatment	1	1
13.	Indications for laparoscopic cholecystectomy, contraindications, performance technique.	1	1
14.	Methods of prevention and correction of errors and complications during laparoscopic cholecystectomy,	1	1
15.	Laparoscopic interventions on the bile ducts.	2	2
16.	Bariatric laparoscopic surgery.	1	1
17.	Laparoscopic operations on the stomach and intestines.	1	1
18.	New technologies in laparoscopy.	1	1
19.	Laparoscopic spenectomy.	1	1
20.	Laparoscopic hepatectomy.	1	1
21.	Laparoscopic operations on the pancreas.	1	1
22.	Laparoscopic and endoscopic surgical interventions for pathology of the anterior abdominal wall	1	1
23.	Endovideosurgery of the main urgent pathological conditions organs of the abdominal cavity	1	1
24.	Acute appendicitis	4	4
25.	Acute cholecystitis	4	4
26.	Laparoscopic interventions on the bile ducts.	2	2

27.	Acute pancreatitis	2	2
28.	Perforating gastroduodenal ulcers	2	2
29.	Acute intestinal obstruction	2	2
30.	Laparoscopic splenectomy	1	1
31.	Laparoscopic hemicolonectomy. Indication. Contraindication. Performance technique.	4	4
32.	Ovarian apoplexy	2	2
33.	Ectopic pregnancy	2	2
34.	Pyosalpinx	2	2
35.	Endovideosurgery of abdominal wounds and injuries	1	2
36.	Indications and contraindications for the use of laparoscopic technique in wounds and injuries of the abdomen	1	1
37.	Application of laparoscopic technique in wounds and injuries of the abdomen	1	1
38.	Together	56	56

List of recommended literature:

The main one

Endoscopic surgery: a study guide / edited by V. M. Zaporozhana, V. V. Hrubnika; V. M. Zaporozhan, V. V. Grubnik, Yu. V. Grubnik and others. - K.: Medicine, 2019. - 591 p.

Additional

1. General surgery: a basic textbook [for higher medical students. education institutions of the IV level of accreditation] / edited by M. D. Zheliba, S. D. Khimicha; M. D. Zheliba, S. D. Khimich, I. D. Gerych, and others. - 2nd ed., ed. - K.: Medicine, 2016. - 448 p.
2. Operative surgery and topographical anatomy: [textbook for higher medical students. education institutions of the IV level of accreditation] / edited by M.P. Kovalskyi; Yu. T. Akhtemiichuk, Yu. M. Vovk, S. V. Doroshenko, and others. - 3rd ed., ed. - K.: Medicine, 2016. - 503 p.
3. Surgery. In 2 vols.: a textbook [for students of higher medical schools. education institutions]. Vol. 1 / edited by: P. G. Kondratenko, V. I. Rusyna, S. O. Boyko, O. O. Boldizhar, P. O. Boldizhar and others. - Vinnytsia: New book, 2019. - 702 p.
4. Surgery. In 2 vols.: a textbook [for students of higher medical schools. education institutions]. Vol. 2 / edited by: P. G. Kondratenko, V. I. Rusyna, S. O. Boyko, O. O. Boldizhar, P. O. Boldizhar and others. - Vinnytsia: New book, 2019. - 702 p.
5. Clinical anatomy and operative surgery: educational and methodological manual for practical classes of interns of obstetrician-gynecologists [and trainee doctors of institutions (fac.) post-diploma. Ministry of Education of Ukraine] / S. M. Bilash, O. M. Pronina, M. M. Koptev, A. V. Pyrog-Zakaznikova; Ministry of Health of Ukraine, UMSA. - Poltava: Myron I. A., 2019. - 113 p.

EVALUATION

Current controlis carried out in seminar classes in accordance with formulated tasks on each topic. When evaluating educational activities, preference is given to standardized control methods: oral survey, structured written works, discussions, role-playing games, reports. When mastering each topic for the current educational activity, the student is given grades on a 4-point traditional scale. The current academic performance is calculated as the average current score, i.e. the arithmetic average of all grades received by the graduate student (student) on a traditional scale, rounded to 2 (two) decimal places, for example 4.75.

Assessment of current discipline control:

The meaning of the "excellent" assessment: the graduate student shows special creative abilities, knows how to acquire knowledge independently, finds and processes the necessary information without the help of a teacher, knows how to use the acquired knowledge and skills to solve problems, is able to produce innovative ways of solving problems, convincingly argues answers, independently reveals his own gifts and inclinations.

The meaning of the grade "good": the graduate student has a good command of the studied material, applies it in practice, solves exercises and problems in standard situations, independently corrects the mistakes made, the number of which is insignificant.

The value of the rating is "satisfactory": the graduate student is able to master a significant part of the theoretical material, but mainly in a reproductive form, demonstrates knowledge and understanding of the main provisions, can analyze the educational material with the help of the teacher, correct errors, among which there are a significant number of essential ones.

The value of the assessment is "unsatisfactory": the graduate student has mastered the material at the level of individual fragments, which constitute a small part of the educational material.

Only those graduate students who have no academic debt and have an average score for the current educational activity of at least 3.00 are admitted to the final certification.

Forms and methods of final control

The final control of the discipline is the assessment.

The grade for the discipline is the arithmetic average of two components:

1) average current score as the arithmetic average of all current grades;
2) traditional assessment for the exam.

The obtained average grade for the discipline by multiplying it by 40 (the obtained grade is rounded to whole numbers) is converted into a grade on a 200-point scale, which, in turn, is converted into a traditional grade on a discipline on a 4-point scale.

Average score for discipline	Rating from the discipline on a 200-point scale	Rating from the discipline on a 4-point scale (traditional assessment)
4.62–5.0	185–200	5

3.77–4.61	151–184	4
3.0–3.76	120–150	3

Individual work

Assessment of the independent work of graduate students and applicants, which is provided for in the topic along with classroom work, is carried out during the current control of the topic in the corresponding classroom session, as well as at the final control (exam).

COURSE POLICY("rules of the game")

Deadlines and Rescheduling Policy

Tasks must be completed on time according to the deadline. For untimely completion of the assignment, the graduate student receives an unsatisfactory grade. If the student of higher education was absent from classes for any reason, then the practice is carried out in the terms set by the teacher in accordance with the "Regulations on the organization of the educational process at ONMedU" (link to the regulations on the university's website https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-process.pdf). Reassembly is carried out in accordance with the approved schedule.

Academic Integrity Policy

Policy educational components is based on principles academic integrity (link on position on site universityhttps://onmedu.edu.ua/wp-content/uploads/2020/07/polozhennja-pro- dobrochesnist.pdf) and is determined by the system of requirements that the teacher presents to the student when studying the educational component:

- independent performance of educational tasks, tasks of current and final control of learning results (for persons with special educational needs, this requirement is applied taking into account their individual needs and capabilities);
- references to sources of information in case of use of ideas, developments, statements, information.

Attendance and Tardiness Policy

Attendance and work in classroom classes (lectures and seminar classes) is mandatory for obtaining a satisfactory grade. A graduate student is allowed to be late for no more than 10 minutes.

Mobile devices

It is permissible to use mobile devices during the lesson with the teacher's permission.

Behavior in the audience

While in the audience, the following values should be cultivated: respect for colleagues; tolerance for others; receptivity and impartiality; argumentation of agreement or disagreement with the opinion of other participants in the discussion, as well as one's own opinion; respecting the dignity of the opponent's personality during communication; compliance with the ethics of academic relationships.