

**MINISTRY OF HEALTH PROTECTION OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY**

Faculty of medicine, international

Department of general, military and children's surgery with a course of urology

**Syllabus of the academic discipline
" Basics of video laparoscopy "**

Scope of the academic discipline	Total number of hours per discipline: 90 hours, 3 credits. Semesters: XI-XII. 6 years of study.
Days, time, place of educational discipline	According to the schedule of classes. Department of General and Military Surgery. Odesa, str. Pastera 9, ave . Valikhovskiyi , 5, Multidisciplinary Medical Center of ONMedU . 1 surgical department, 2 surgical department
Teacher(s)	M.A. Kashtalyan, MD., professor, head of the department. Professors: MD., V. E. Vansovich, MD., MD., O.S.Gerasimenko. Associate professors: Ph.D., Drobkov O.L., Ph.D., Kvasnevsky O.A., Ph.D., Kvasnevsky Y.A., Ph.D., Kolotvin A.O., Ph.D., Ilyina-Stognienko V.Yu., Ph.D., Davydov D.M. Assistants: Ph.D., Romak O.I., Ph.D., Samarskyi I.M., Ph.D., Muradyan K.R., Bilash O.V., Pokhlebin V.B., Vityuk M.S.
Contact Information	Help by phone: Bilash Oksana Viktorivna, head teacher of the department 093-848-4048 Ilyina-Stognienko Viktoriya Yuriivna , responsible for organizational and educational work of the department 067-971-21-05 Zhebrakovska Maryna Yuriivna, senior laboratory technician of the department 050-316-10-91 E - mail : surgdep@onmedu.edu.ua Face-to-face consultations: from 2:00 p.m. to 5:00 p.m. every Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday Online consultations: from 2:00 p.m. to 5:00 p.m. every Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday. The link to the online consultation is provided to each group during classes separately.

COMMUNICATION

Communication with education seekers will be conducted in the classroom (face-to-face).
During distance learning, communication is carried out through the Microsoft Teams platform, as well as through Outlook e-mail correspondence.

MINISTRY OF HEALTH PROTECTION OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of general, military and children's surgery with a course of urology

ABSTRACT OF THE ACADEMIC DISCIPLINE

Subject study of the discipline - the use of modern surgical methods of diseases of the abdominal cavity

Prerequisites and post-requisites of the discipline (place of the discipline in the educational program):

Prerequisites: Ukrainian language (by professional direction), foreign language (by professional direction), Latin language and medical terminology, medical biology, medical and biological physics, biological and bioorganic chemistry, human anatomy, histology, cytology and embryology, physiology, microbiology, virology and immunology, general surgery, hospital surgery.

Post-requisites: surgery, traumatology and orthopedics, urology, neurosurgery, anesthesiology and intensive care, emergency and emergency medical care .

The purpose of the discipline: The student's acquisition of knowledge and the formation of elements of professional competences in the field of surgery, and improvement of skills and competences acquired during the study of previous disciplines.

Tasks of the discipline:

1. To know the theoretical foundations of the chosen discipline, its scientific direction, diagnosis, clinic, treatment and prevention of diseases with video laparoscopy.

2. Be able to determine tactics treatment of common complications of laparoscopic operations.

3. Mastering the skills of operating endoscopic equipment in the operating room and tools, safety rules. Learning the rules of using surgical energy in laparoscopy.

Expected results:

As a result of studying the academic discipline, the applicant must:

Know:

- endoscopic instruments, formation of endoscopic knots, methods of positioning the instruments and the patient, the main stages of laparoscopic interventions in diseases of the abdominal organs;

Be able:

- use endoscopic instruments;
- place the patient on the operating table taking into account the purpose of the operation and the general condition of the patient;
- perform carboxyperitoneum;

DESCRIPTION OF THE ACADEMIC DISCIPLINE

Forms and methods of education

The discipline will be taught in the form of practical classes (30 classroom hours) and the organization of the applicant's independent work (60 hours).

Teaching methods: conversation, solving clinical situational problems, demonstration and practice of manipulation skills according to list 5, instruction and practice of skills on simulation dummies.

Basics of video laparoscopy

Content of the academic discipline

Content module 1. History of endoscopic surgery. Modern and new endoscopic studies

MINISTRY OF HEALTH PROTECTION OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of general, military and children's surgery with a course of urology

Topic 1. The main stages of development of laparoscopy and laparoscopic surgery.

The first mentions of endoscopy. Laparoscopic surgery of the 19th century. Founders of endoscopy.

Topic 2. General information about laparoscopy in surgery. The future of laparoscopic surgery

Basic information about surgical laparoscopy, equipment and instruments. Robotic surgery.

Content module 2. Use of surgical equipment and surgical instruments. Position of the patient on the operating table.

Topic 3. Instrumentation, trocars, optical devices in laparoscopy.

Veresha needle for carboxyperitoneum. Trocars for laparoscopy. Trocars for obese patients. Grasping and Dissecting Forceps. Metal outer tubes, scissors. Instruments for monopolar and bipolar coagulation.

Topic 4. Use of instruments, trocars, optical devices in laparoscopy.

Tool requirements. Standard tools. Special tools. Tools - holders. Dissectors. Needle holders. Tools for stapling. Requirements for optical devices. 3D optics

Topic 5. Formation of endoscopic knots and sutures.

Component parts of the node. Types of nodes. Knot tying technique. Hardware suture application technique.

Content module 3. Basics of laparoscopy.

Topic 6. Patient posture and the principle of gravitational displacement

Criteria for positioning the patient during laparoscopic interventions. Basic rules of patient placement. The main criteria for the patient's posture. Operating table and materials. The principle of gravitational displacement. Positional injuries and their consequences.

Topic 7. Techniques of various options for placing the first trocar.

Carboxyperitoneum. General principles of access and manipulation in robotic and laparoscopic surgical interventions.

Topic 8. Two-port surgery.

Introduction. Single Laparoscopic Access System (SILS). Various port systems. Technical options for managing tools. Instruments for single-port surgery.

Topic 9. Diagnostic laparoscopic interventions.

Diagnostic laparoscopy. Introduction. Indication. Special preoperative diagnostics. Placement of the patient. Specifications. Examination of the patient. Expanding the volume of laparoscopic operations. Specific intraoperative complications and their relief.

Topic 10. Simultaneous laparoscopic interventions.

Indications, contraindications. Methods of placement of trocars and the patient. Indication.

Content module 4. Modern video laparoscopic treatment for diseases and injuries of abdominal organs.

Topic 11. Laparoscopy for injuries of abdominal organs.

Laparoscopy for abdominal injuries. Laparoscopy for abdominal complaints of unclear origin.

MINISTRY OF HEALTH PROTECTION OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of general, military and children's surgery with a course of urology

Topic 12. Laparoscopy in oncology.

The choice of the method of surgical intervention. Expanding the volume of intervention. Practical recommendations. Open surgery or laparoscopic?

Topic 13. Acute appendicitis Laparoscopic surgery of the esophagus and stomach.

A minimally invasive approach in the diagnosis and treatment of acute appendicitis and its complications. The technique of different variants of appendectomy. Indications for antireflux surgical treatment. Laparoscopic operations for reflux diseases. Fundoplication according to Nissen and Toupe. Special indications, contraindications.

Topic 14. Acute cholecystitis.

Minimally invasive approach in diagnosis and treatment. Technical features and prevention of complications Laparoscopic cholecystectomy for acute cholecystitis. Diagnosis and treatment of postoperative complications .

Topic 15. Bariatric laparoscopic interventions for obesity.

Indications, contraindications. Methods of placement of trocars and the patient. Installation of a gastric balloon. Gastric banding. Sleeve resection of the stomach. Gastric bypass. Biliopancreatic bypass. Advantages of bariatric surgery.

Test.

List of recommended literature:

Main:

1. Berducci M., Fuchs H.F., Omelanczuk P. et al. Phase II clinical experience and long-term follow-up using the next-generation single-incision platform FMX314 // Surg. Endosc. 2016. Vol. 30. P. 953-960.
2. Lujan J.A., Soriano M.T., Abrisqueta J. et al. Single-port Colectomy VS Multi-port Laparoscopic Colectomy. Systematic Review and Meta-analysis of More Than 2800 Procedures // Chir. ESP. 2014. Vol. 93. P. 307-319.
3. Pryor Ad., Tushar J.R., Di Bernardo L.R. Single-port cholecystectomy with the TransEnterix SPIDER: simple and safe // Surg. Endosc. 2010. Vol. 24. P. 917-923.
4. Ендоскопічна хірургія : навчальний посібник / за ред. В. М. Запорожана, В. В. Грубніка ; В. М. Запорожан, В. В. Грубнік, Ю. В. Грубнік та ін. Київ: Медицина, 2019. 591 с.
5. Загальна хірургія : базовий підручник [для студентів вищих мед. навч. закладів IV рівня акредитації] / за ред. М. Д. Желіби, С. Д. Хімича ; М. Д. Желіба, С. Д. Хімич, І. Д. Герич та ін. 2-ге вид., випр. Київ: Медицина, 2016. 448 с.
6. Клінічна анатомія і оперативна хірургія : навчально-методичний посібник до практичних занять лікарів-інтернів акушерів-гінекологів [і лікарів-слухачів закладів (фак.) післядиплом. освіти МОЗ України] / С. М. Білаш, О. М. Проніна, М. М. Коптев, А. В. Пирог-Заказникова ; МОЗ України, УМСА. Полтава: Мирон І. А., 2019. 113 с.
7. Оперативна хірургія та топографічна анатомія : підручник для студентів вищих мед. навч. закладів IV рівня акредитації / за ред. М. П. Ковальського ; Ю. Т. Ахтемійчук, Ю. М. Вовк, С. В. Дорошенко та ін. 3-тє вид., випр. Київ: Медицина, 2016. 503 с.
8. Хірургія. У 2-х т. : підручник [для студентів вищих мед. навч. закладів]. Т. 1 / за ред.: П. Г. Кондратенка, В. І. Русина, С. О. Бойко, О. О. Болдіжар, П. О. Болдіжар та ін. Вінниця : Нова книга, 2019. 702 с.
9. Хірургія. У 2-х т. : підручник [для студентів вищих мед. навч. закладів]. Т. 2 / за ред.: П. Г. Кондратенка, В. І. Русина, С. О. Бойко, О. О. Болдіжар, П. О. Болдіжар та ін. Вінниця : Нова книга, 2019. 712 с.

MINISTRY OF HEALTH PROTECTION OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of general, military and children's surgery with a course of urology

Additional:

1. Ahmed J., Ciaccio F., Ferrara V. et al. Current status of single-incision laparoscopic surgery. European experts' views // Surg. Laparosc. Endosc. Percutan. Tech. 2012. Vol. 22. P. 194-199.
2. Benhidjeb T., Stark M., Izbicki J.R., Mann O. In: Tinelli A. (Hrsg) Laparoscopic Entry. London: Springer, 2012. P. 133-158.
3. Eisenber D., Vidowszky J., Lan J. et al. Comparison of robotic and laparoscopic single-site surgery systems in a suturing and knot tying task // Surg. Endosc. 2013. Vol. 27. P. 3182-3186.
4. Fung A.K., Aly E.H. Systematic review of single-incision laparoscopic colonic surgery // Brit. J. Surg. 2012. Vol. 99. P. 1353-1364.
5. Hayashi M., Asakuma M., Komeda K. et al. Effectiveness of a surgical glove port for single port surgery // World J. Surg. 2010. Vol. 34. P. 2487-2489.
6. Huscher C.G., Mingoli A., Sgarzini G. et al. Standard laparoscopic versus single-incision laparoscopic colectomy for cancer: Early results of a randomized prospective study // Am. J. Surg. 2012. Vol. 204. N. 1. P. 115-120.
7. Maggiori L., Gaujoux S., Tribillon E. et al. Single-incision laparoscopic resection: A systematic review and meta-analysis of more than a thousand procedures // Colorectal Dis. 2012. Vol. 14. P. e 643-654.
8. Makino T., Milsom J.W., Lee S.W. Feasibility and safety of single-incision laparoscopic colectomy // Ann. Surg. 2012. Vol. 255. P. 667-676.
9. Navarra G., Pozza E., Occionorelli S. One-wound laparoscopic cholecystectomy // Brit. J. Surg. 1997. Vol. 84. P. 695.
10. Petroni G., Niccolini M., Caccavaro S. et al. A novel robotic system for single-port laparoscopic surgery: preliminary experience // Surg. Endosc. 2013. Vol. 27. P. 1932-1937.
11. Poon J.T., Cheung C.W., Fan J.K. et al. Single-incision versus conventional laparoscopic colectomy for colonic neoplasm: A randomized, controlled trial // Surg. Endosc. 2012. DOI: 10.1007/s 00464-012-2262-2.
12. Pryor Ad., Tushar J.R., Di Bernardo L.R. Single-port cholecystectomy with the TransEnterix SPIDER: simple and safe // Surg. Endosc. 2010. Vol. 24. P. 917-923.
13. Березницький Я.С., Захараш М.П., Мішалов В.Г., Шидловський В.О. Хірургія: підручник. Том I. 2006.
14. Березницький Я.С., Захараш М.П., Мішалов В.Г. Хірургія: підручник. Том II. 2007.
15. Захараш М.П., Пойда О.І., Кучер М.Д. Хірургія: підручник. Київ: Медицина, 2006. 656 с.
16. Ковальчук Л.Я., Саенко В.Ф., Книшов Г.В. Клінічна хірургія. В 2 томах. Тернопіль: Укрмедкнига, 2000. 286 с.
17. Лекції з госпітальної хірургії: навч. посібник. Т. 1 / за ред. В.Г. Мішалова. - 2-е вид., доп. і переробл. Київ: Видавничий дім "Асканія", 2008. 287 с.
18. Лекції з госпітальної хірургії: навч. посібник. Т. 2 / за ред. В.Г. Мішалова. - 2-е вид., доп. і переробл. Київ: Видавничий дім "Асканія", 2008. 382 с.
19. Радзіховський А.П., Бабенко В.І. Невідкладна хірургія органів черевної порожнини. Київ: "Фенікс", 2002. 319 с.
20. Хірургія : підручник / за ред. Л.Я. Ковальчука. Тернопіль : ТДМУ, 2010. 1056 с.
21. Хірургія: підручник, том III (базовий підручник для первинної спеціалізації з хірургії). Книга 2 (клінічна хірургія) / За ред. Березницького Я.С., Захараша М.П., Мішалова В.Г. Дніпропетровськ: РВА"Дніпро-УАБ", 2011. 782 с.

**MINISTRY OF HEALTH PROTECTION OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of general, military and children's surgery with a course of urology**

Electronic information resources

1. <https://moz.gov.ua/> – Ministry of Health of Ukraine
2. www.ama-assn.org - American Medical Association / American Medical Association
3. www.who.int - World Health Organization
4. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
5. <http://bma.org.uk> - British Medical Association
6. <http://iss-sic.com/> - International Society of Surgeons

ASSESSMENT

Forms and methods of current control: oral survey, testing, assessment of performance of practical skills, solution of situational clinical tasks, assessment of activity in class.

The structure of the current evaluation in the practical lesson :

1. Evaluation of theoretical knowledge on the subject of the lesson:
 - methods: survey, solving a situational clinical problem;
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2 .
2. Evaluation of practical skills and manipulations on the subject of the lesson:
 - methods: assessment of the correctness of the performance of practical skills
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2 .

Current evaluation criteria in practical training

Rating	Evaluation criteria
"5"	The education seeker is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills and interpretations of clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
"4"	The education seeker has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills and interpretations of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
"3"	The education seeker does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of a situational clinical problem, demonstrates practical skills and interpretations of clinical, laboratory and instrumental research data with significant errors.
"2"	The education seeker does not possess the material, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills and interpretation of clinical, laboratory and instrumental research data.

The final control in the form of a credit is evaluated on a two-point scale: - the grade "passed" is awarded to an education seeker who has completed the curriculum of the discipline and has no academic debt; the level of competence is high (creative); – the grade "failed" is assigned to an education seeker who has not completed the curriculum of the discipline, has academic debt (average grade below 3.0 and/or missed classes); the level of competence is low (receptive - productive).

Possibility and conditions of obtaining additional (bonus) points: not provided.

MINISTRY OF HEALTH PROTECTION OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of general, military and children's surgery with a course of urology

INDEPENDENT WORK OF EDUCATION SEEKERS OF HIGHER EDUCATION

Independent work involves preparation for each practical session.

POLICY OF EDUCATIONAL DISCIPLINE

and Rescheduling Policy :

- Absences of classes for non-respectable reasons will be worked out according to the schedule of the teacher on duty.
- Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.

Academic Integrity Policy :

education seekers must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in case of use of ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

Unacceptable in educational activities for participants of the educational process are:

- the use of family or official ties to obtain a positive or higher grade during any form of control of academic performance or academic merit;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- going through procedures for monitoring the results of training by fake persons.

For violation of academic integrity, education seekers may be held to the following academic responsibility:

- a decrease in the results of assessment of the control work, assessment in class, credit, etc.;
- retaking the assessment (test, credit, etc.);
- assignment of additional control measures (additional individual tasks, control works, tests, etc.);
- conducting an additional inspection of other works authored by the violator.

Attendance and Tardiness Policy:

Uniform: medical gown, surgical suit, cap, mask, change of footwear.

Equipment: notebook, pen, phonendoscope.

State of health: education seekers suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

An education seeker who is late for a class can attend it, but if the teacher put " ab " in the journal, he must complete it in the general order.

Use of mobile devices :

Mobile devices may be used by education seekers with the permission of the instructor if they are needed for the assignment.

Behavior in the audience:

The behavior of education seekers and teachers in the classrooms should be working and calm, strictly responsible rules, installed Regulations on academic integrity and ethics of academic

MINISTRY OF HEALTH PROTECTION OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY

Department of general, military and children's surgery with a course of urology

relations at Odessa National Medical University , in accordance with the Code of Academic Ethics and University Community Relations of Odessa National Medical University , Regulations on prevention and detection of academic plagiarism in research and educational work of higher education seekers, scientists and teachers Odessa National Medical University .