

MINISTRY OF HEALTH OF UKRAINE  
KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Obstetrics and Gynecology No.2  
Academic year 2020|2022

**SYLLABUS OF THE ACADEMIC DISCIPLINE**

"Endoscopy in gynecological practice" (e/c)  
(name of academic discipline)

Field of knowledge 22 Healthcare

Specialty / EQL EPP 222 Medicine, second Master's level  
Medicine  
Year V

The syllabus of the discipline was approved at  
the meeting of the department of Obstetrics  
and Gynecology No.2

Protocol of  
" 28 " August 2021 No. 10

Head of the department  
  
(signature) Professor V.V. Lazurenko  
(initials and surname)

Approved by the methodical commission of  
KhNMU on the problems of surgical  
profile \_\_\_\_\_  
(name)

Protocol of.  
" 28 " August 2021 No. 1

Head   
(signature) Professor V.O. Syplyvyi  
(initials and surname)

**Syllabus builders**

Prof. Victoria Valentynivna Lazurenko,  
Assoc. Prof. Olga Borysivna Ovcharenko

**Data on teachers who teach the discipline**

First name, patronymic, surname of the teacher	Prof. Victoria Valentynivna Lazurenko, Assoc. Prof. Roman Anatolyevsch Safonov
Contact phone number	0977089434
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Schedule of classes	According to the schedule of academic year 2021-2022
Consultations	Offline consultations: by prior arrangement; Online consultations: in the Moodle system.

## INTRODUCTION

**Syllabus of the elective course** "Endoscopy in gynecological practice" is made for the educational-professional program "Medicine" of the second (Master's) level of knowledge 22 Health care, specialty 222 Medicine

Description of the discipline (abstract)

The amount of study load is described in ECTS credits, which are credited to students upon successful mastering of the relevant sections of gynecology. Types of educational activities of students according to the curriculum are: practical classes, independent work. The list of criteria for providing gynecological care is regulated by the relevant protocols in the specialty "Obstetrics and Gynecology" of the Ministry of Health of Ukraine.

**Description of the discipline (abstract)**

The amount of study load is described in ECTS credits, which are credited to students upon successful mastering of the relevant sections of in gynecology. Types of educational activities of students according to the curriculum are: practical classes, independent work. The list of criteria for obstetric care is regulated by the relevant protocols for the specialty "Obstetrics and Gynecology" of the Ministry of Health of Ukraine.

The **subject** of study of the elective course is endoscopy in gynecology.

**Interdisciplinary relationship:** "Endoscopy in gynecological practice" as a branch of the discipline "Obstetrics and Gynecology" is based on knowledge obtained by students in the study of medical biology, normal and pathological anatomy, topographic anatomy, normal and pathological physiology of the female reproductive system, histology and embryology, microbiology, pharmacology, clinical genetics, internal occupational and infectious diseases, surgical diseases, hygiene, social medicine, social medicine health economics and integrates with these disciplines.

### Elective course of endoscopy in gynecological practice

**Topic 1.** History of laparoscopy in gynecological practice. Culdoscopy. Anatomy of the abdominal cavity. Topographic anatomy of the pelvic organs. Blood supply and innervation of female genitals. Lymphatic vessels. Ureter. Basic topographic landmarks important when performing laparoscopic operations.

**Topic 2.** Technique of laparoscopy. Equipment of endoscopic operating room, tools. Features of pneumoperitoneum technique and introduction of troacars. Technical errors in the imposition of pneumoperitoneum. Features of gas-free laparoscopic access. Technique of examination of abdominal organs during laparoscopy.

**Topic 3.** Indications and contraindications to laparoscopy. Clinical and laboratory examination of patients. Types of anesthesia during laparoscopic operations. Epidural anesthesia. General intravenous anesthesia with and without mechanical ventilation. Monitoring the patient's condition during surgery.

**Topic 4.** Preoperative preparation and management of patients in the postoperative period. Postoperative complications and their prevention. Features of the postoperative period after laparoscopy. Rehabilitation after discharge from the hospital.

**Topic 5.** Laparoscopic surgery for acute abdomen syndrome in gynecology. Possibilities of endoscopic surgery in ectopic pregnancy, ovarian apoplexy and pelvic inflammatory disease. Dynamic laparoscopy in acute inflammatory diseases of the uterine appendages.

**Topic 6.** Features of laparoscopic operations during pregnancy. Indications and contraindications. Conditions of performance and management of pregnant women in the postoperative period. Features of laparoscopy technique during pregnancy. Possible complications and their prevention.

**Topic 7.** Laparoscopic operations on the uterine adnexa. Features of interventions in benign ovarian tumors, polycystic ovary syndrome, endometriosis. Wedge resection of the ovaries. Ovarian biopsy. Cyst removal. Ovariectomy. Adnexectomy. Methods of sample collection. Features of laparoscopy technique at various localizations of endometriosis

**Topic 8.** Reconstructive operations in tubal-peritoneal infertility. Chromosalpingoscopy. Salpingo-ovariolysis. Fimbriolysis. Salpingostomy. Laparoscopic adhesiolysis. Features of the postoperative period. Additional measures to prevent the formation of joints.

**Topic 9.** Laparoscopic operations for benign uterine tumors. Indications and contraindications. Removal of leiomatous nodes of various localization. Technique of performing organ-saving operations. Endosurgical sutures and nodes.

**Topic 10.** Technique of laparoscopic hysterectomy. Uterine amputation with and without appendages. Uterine extirpation. Indications, features of management of patients in the postoperative period. Principles of rehabilitation of patients after discharge from the hospital.

**Topic 11.** Hysteroscopy. Hysteroresectoscopy. Office hysteroscopy. Indications and contraindications. Features of manipulation technique. Medical documentation. Possible complications and their prevention.

**Topic 12.** Modern possibilities of endoscopic surgery in oncological diseases of female genitals. Advantages of minimally invasive surgery. Features of preoperative preparation and postoperative rehabilitation

### Description of the elective course "Endoscopy in gynecological practice"

Name of indicators	Field of knowledge, direction of training, educational and qualification level	Characteristics of the discipline		
		<b>Full-time training</b>		
Number of credits – 3	Training direction <u>22 Healthcare</u> (code and name)	<b>Elective course</b>		
Total number of hours - 90	Specialty: <u>222 Medicine</u> (code and name)	<b>Year of training:</b>		
		5th		
		<b>Term</b>		
		10th		
Hours for full-time form of study: Classroom hours - 20 independent student work hours - 70	Education and qualification level: <u>Second (Master's level)</u>	<b>Lectures</b>		
		<b>Practical classes, seminars</b>		
		20 hours		
		<b>Laboratory</b>		
		<b>Independent work</b>		
70 hours				
<b>Individual classes:</b>				
Type of control: credit				

**Topics of lectures.****Not included in the program****Topics of practical classes**

No.	Topic name	Number of hours
1	History of laparoscopy in gynecological practice. Culdoscopy. Anatomy of the abdominal cavity. Topographic anatomy of the pelvic organs. Blood supply and innervation of female genitals. Lymphatic vessels. Ureter. Basic topographic landmarks important when performing laparoscopic operations.	2
2	. Technique of laparoscopy. Equipment of endoscopic operating room, tools. Features of pneumoperitoneum technique and introduction of troacars. Technical errors in the imposition of pneumoperitoneum. Features of gas-free laparoscopic access. Technique of examination of abdominal organs during laparoscopy.	1
3	Indications and contraindications to laparoscopy. Clinical and laboratory examination of patients. Types of anesthesia during laparoscopic operations. Epidural anesthesia. General intravenous anesthesia with and without mechanical ventilation. Monitoring the patient's condition during surgery.	1
4	Preoperative preparation and management of patients in the postoperative period. Postoperative complications and their prevention. Features of the postoperative period after laparoscopy. Rehabilitation after discharge from the hospital.	2
5	Laparoscopic surgery for acute abdomen syndrome in gynecology. Possibilities of endoscopic surgery in ectopic pregnancy, ovarian apoplexy and pelvic inflammatory disease. Dynamic laparoscopy in acute inflammatory diseases of the uterine appendages	1
6	Features of laparoscopic operations during pregnancy. Indications and contraindications. Conditions of performance and management of pregnant women in the postoperative period. Features of laparoscopy technique during pregnancy. Possible complications and their prevention	2
7	Laparoscopic operations on the uterine adnexa. Features of interventions in benign ovarian tumors, polycystic ovary syndrome, endometriosis. Wedge resection of the ovaries. Ovarian biopsy. Cyst removal. Ovariectomy. Adnexectomy. Methods of sample collection. Features of laparoscopy technique at various localizations of endometriosis	1
8	Reconstructive operations in tubal-peritoneal infertility. Chromosalpingoscopy. Salpingo-avariolysis. Fimbriolysis. Salpingostomy. Laparoscopic adhesiolysis. Features of the postoperative period. Additional measures to prevent the formation of joints.	2
9	Laparoscopic operations for benign uterine tumors. Indications and contraindications. Removal of leiomatous nodes of various localization. Technique of performing organ-saving operations. Endosurgical sutures and nodes	2
10	Technique of laparoscopic hysterectomy. Uterine amputation with and without appendages. Uterine extirpation. Indications, features of management of patients in the postoperative period. Principles of rehabilitation of patients after discharge from the hospital.	2
11	Hysteroscopy. Hysteroscopy. Office hysteroscopy. Indications and contraindications. Features of manipulation technique. Medical documentation. Possible complications and their prevention.	2

12	Modern possibilities of endoscopic surgery in oncological diseases of female genitals. Advantages of minimally invasive surgery. Features of preoperative preparation and postoperative rehabilitation.	2
13	<b>Total</b>	20

### Independent work

No.	Topic name	Number of hours
1	History of laparoscopy in gynecological practice. Culdoscopy. Anatomy of the abdominal cavity. Topographic anatomy of the pelvic organs. Blood supply and innervation of female genitals. Lymphatic vessels. Ureter. Basic topographic landmarks important when performing laparoscopic operations.	5
2	. Technique of laparoscopy. Equipment of endoscopic operating room, tools. Features of pneumoperitoneum technique and introduction of trocars. Technical errors in the imposition of pneumoperitoneum. Features of gas-free laparoscopic access. Technique of examination of abdominal organs during laparoscopy.	6
3	Indications and contraindications to laparoscopy. Clinical and laboratory examination of patients. Types of anesthesia during laparoscopic operations. Epidural anesthesia. General intravenous anesthesia with and without mechanical ventilation. Monitoring the patient's condition during surgery.	5
4	Preoperative preparation and management of patients in the postoperative period. Postoperative complications and their prevention. Features of the postoperative period after laparoscopy. Rehabilitation after discharge from the hospital.	5
5	Laparoscopic surgery for acute abdomen syndrome in gynecology. Possibilities of endoscopic surgery in ectopic pregnancy, ovarian apoplexy and pelvic inflammatory disease. Dynamic laparoscopy in acute inflammatory diseases of the uterine appendages	6
6	Features of laparoscopic operations during pregnancy. Indications and contraindications. Conditions of performance and management of pregnant women in the postoperative period. Features of laparoscopy technique during pregnancy. Possible complications and their prevention	6
7	Laparoscopic operations on the uterine adnexa. Features of interventions in benign ovarian tumors, polycystic ovary syndrome, endometriosis. Wedge resection of the ovaries. Ovarian biopsy. Cyst removal. Ovariectomy. Adnexectomy. Methods of sample collection. Features of laparoscopy technique at various localizations of endometriosis	5
8	Reconstructive operations in tubal-peritoneal infertility. Chromosalpingoscopy. Salpingo-ovariolysis. Fimbriolysis. Salpingostomy. Laparoscopic adhesiolysis. Features of the postoperative period. Additional measures to prevent the formation of joints.	6
9	Laparoscopic operations for benign uterine tumors. Indications and contraindications. Removal of leiomatous nodes of various localization. Technique of performing organ-saving operations. Endosurgical sutures and nodes	6
10	Technique of laparoscopic hysterectomy. Uterine amputation with and without appendages. Uterine extirpation. Indications, features of management of patients in the postoperative period. Principles of rehabilitation of patients after discharge from the hospital.	5
11	Hysteroscopy. Hysteroscopic resection. Office hysteroscopy. Indications and contraindications. Features of manipulation technique. Medical documentation. Possible complications and their prevention.	5
12	Modern possibilities of endoscopic surgery in oncological diseases of female	6

	genitals. Advantages of minimally invasive surgery. Features of preoperative preparation and postoperative rehabilitation/	
13	Final term control	4
14	Total	<b>70</b>

### Teaching methods

Practical training:

- oral interview;
- discussions on various issues;
- role and business games;
- case methods;
- mastering of practical skills;

### Control methods

When studying the discipline, the current and final semester control is used. Also, there is a mandatory control of the assimilation of educational material of the discipline, assigned to independent work.

Current control (assimilation of certain topics) is carried out in the form of oral interviews, testing, conversations of students on predetermined issues, in the form of speeches of higher education students with reports when discussing educational issues in practical classes.

In order to assess the independent work of students, an alternative option is offered (*optional*): traditional types of tasks: writing a test, abstract or creative types: preparation of a multimedia presentation, elaboration of educational literature (summary, review, citation, abstracts, additions to lectures).

The final semester control in the discipline is a mandatory form of control of academic achievements of higher education students. It is performed orally. The terms of the final semester control are set by the schedule of the educational process, and the amount of educational material, which is submitted for the final term control, is determined by the work program of the discipline.

The total number of rating points for the study of the discipline for the semester is calculated as the sum of points obtained from the results of the current control and points obtained from the results of the final semester control. The maximum amount of points for the semester is 200 points, the minimum – 120 points.

### Form of assessment of students' knowledge

The form of final control of academic performance in the discipline is a grading test.

### Recalculation of the average score for current academic activities on a multi-point scale

Assessment of students is carried out in accordance with the “Instructions for assessing the educational activities of students in the European credit transfer system for the organization of the educational process at KhNMU” (Table 2).

Table 1

### Recalculation of the average score for current academic activities on a multi-point scale (for disciplines ending with credit)

4- point scale	200- point scale	4- point scale	200- point scale	4- point scale	200- point scale
5	200	4.22-4,23	169	3.45-3,46	138
4.97-4,99	199	4.19-4,21	168	3.42-3,44	137
4.95-4,96	198	4.17-4,18	167	3.4-3,41	136
4.92-4,94	197	4.14-4,16	166	3.37-3,39	135

4.9-4,91	196	4.12-4,13	165	3.35-3,36	134
4.87-4,89	195	4.09-4,11	164	3.32-3,34	133
4.85-4,86	194	4.07-4,08	163	3.3-3,31	132
4.82-4,84	193	4.04-4,06	162	3.27-3,29	131
4.8-4,81	192	4.02-4,03	161	3.25-3,26	130
4.77-4,79	191	3.99-4,01	160	3.22-3,24	129
4.75-4,76	190	3.97-3,98	159	3.2-3,21	128
4.72-4,74	189	3.94-3,96	158	3.17-3,19	127
4.7-4,71	188	3.92-3,93	157	3.15-3,16	126
4.67-4,69	187	3.89-3,91	156	3.12-3,14	125
4.65-4,66	186	3.87-3,88	155	3.1-3,11	124
4.62-4,64	185	3.84-3,86	154	3.07-3,09	123
4.6-4,61	184	3.82-3,83	153	3.05-3,06	122
4.57-4,59	183	3.79-3,81	152	3.02-3,04	121
4.54-4,56	182	3.77-3,78	151	3-3,01	120
4.52-4,53	181	3.74-3,76	150	Less than 3	Insufficient
4.5-4,51	180	3.72-3,73	149		
4.47-4,49	179	3.7-3,71	148		
4.45-4,46	178	3.67-3,69	147		
4.42-4,44	177	3.65-3,66	146		
4.4-4,41	176	3.62-3,64	145		
4.37-4,39	175	3.6-3,61	144		
4.35-4,36	174	3.57-3,59	143		
4.32-4,34	173	3.55-3,56	142		
4.3-4,31	172	3.52-3,54	141		
4,27-4,29	171	3.5-3,51	140		
4.24-4,26	170	3.47-3,49	139		

Table 2.

**Assessment of theoretical knowledge, if practical skills are assessed by the criteria of “passed”, “failed”**

Number of questions	“5”	“4”	“3”	Oral answer for questions in the cards, which include the theoretical part of the discipline	For each answer the student receives from 10 to 16 points, which corresponds to: “5” - 16 points; “4” - 13 points; “3” - 10 points.
1	16	13	10		
2	16	13	10		
3	16	13	10		
4	16	13	10		
5	16	13	10		
	80	65	50		

### Credit questions

1. Modern possibilities of surgical interventions by endoscopic access.
2. Topographic anatomy of the pelvic organs.
3. Principles of preparation of patients for endoscopic intervention.
4. Methods of anesthesia in gynecological endoscopy.
5. Complications during endoscopic interventions.
6. Endoscopic operating room equipment.
7. Endoscopic instruments.
8. Safety rules when working in the endoscopic operating room.
9. Stages of laparoscopy.
10. Classification of ovarian tumors.
11. Clinical manifestations of different types of ovarian tumors.
12. Laboratory and instrumental methods of examination of patients with ovarian tumors.



14. The role of laparoscopy in the diagnosis of ovarian tumors.
15. Endoscopic methods of intervention for ovarian tumors.
16. The role of laparoscopy in the treatment of inflammatory diseases of the female genital organs.
18. Reconstructive-plastic operations in tubal-peritoneal infertility.
20. Prevention of complications in the postoperative period.
21. Presentation, diagnosis, differential diagnosis of ectopic pregnancy.
23. Laparoscopy in the diagnosis and treatment of ectopic pregnancy.
24. Presentation, diagnosis, differential diagnosis of ovarian apoplexy. Endoscopic approach in organ-sparing surgery for ovarian apoplexy.
25. Nourishment disorder of ovarian tumors, differential diagnosis.
26. Modern approaches to surgical treatment of torsion of the leg of the ovarian tumor.
27. The role of laparoscopy in the treatment of inflammatory diseases of the female genital organs.
28. "Acute abdomen" in gynecology. Contraindications to endoscopic interventions in the presentation of "acute abdomen" in gynecology.
29. Prevention of complications in the postoperative period.
30. Surgical treatment of uterine fibroids (myomectomy, hysteroscopy, uterine artery embolization).
31. What is the essence of focused ultrasound surgery for uterine fibroids? Indications and contraindications to hysteroscopy.
32. Features of anesthesia during hysteroscopy.
33. Preparation of patients for the procedure.
34. Postoperative management of patients after hysteroscopy. Technique of diagnostic hysteroscopy.
35. Complications associated with hysteroscopy.
36. Hysteroscopic diagnosis of disorders in the uterine cavity.
37. Hysteroscopy: indications and contraindications.
38. Features of anesthesia during hysteroscopy.
39. Indications and contraindications to hysteroscopic removal of submucosal uterine fibroids.
40. The role of hysteroscopy in the diagnosis and treatment of female infertility.

### **Individual tasks**

Preparation of presentations of problematic character.  
Participation in student scientific conferences, round tables.

### **Tasks for independent work**

Preparation for practical classes. Processing of material according to the reference abstract. Work with supporting literature. Search and analytical work.

### **Teacher's (department's) policy Academic expectations from students**

#### Course requirements

Students are expected to attend all practical classes. Missed classes should be redone (according to the schedule on the information stand of the department)

Written tasks and homework must be done completely and on time, if students have questions, they can contact the teacher in person or by e-mail, which the teacher will provide in the first practical class.

During the lectures, students are recommended to keep a synopsis of the class and keep a sufficient level of silence. Asking questions to the teacher is perfectly normal.

#### Practical training

When conducting practical classes at the patient's bedside, in the delivery room, operating room, students must follow the rules of medical ethics and deontology. They must have appropriate clothing and medical examination results.

Actively participating in the discussion in the classroom, students should be ready to understand the material in detail, ask questions, express their views, engage in discussion. During the discussion it is important to:

- show respect for colleagues,
- have tolerance for others and their experience,
- be receptive and impartial,
- be able to disagree with the opinion, but to respect the personality of the opponent,
- provide careful argumentation of one's opinion and the courage to change one's position under the influence of evidence,
- self-expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,
- mandatorily get acquainted with primary sources.

A creative approach in its various manifestations is welcome. Students are expected to be interested in participating in city, national and international conferences, competitions and other events in the subject profile.

### **Occupational health**

During the first class of the course it is necessary to explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit to the audience, where the fire extinguisher is, how to use it, and so on.

### **Behavior in the classroom** **Basic "dos" and "don'ts"**

It is important to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and do not differ in principle from generally accepted norms.

During classes it is allowed to:

- leave the classroom for a short time if necessary and with the permission of the teacher;
- drink soft drinks;
- take photos of presentation slides;
- take an active part in the class (see Academic expectations from students).

It is prohibited to:

- eat (except for persons whose special medical condition requires it - in this case, medical confirmation is required);
- smoke, drink alcohol and even low-alcohol beverages or drugs;
- use obscene language or use words that offend the honor and dignity of colleagues and faculty;
- gamble;
- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);
- shout, yell or listen to loud music in classrooms and even in corridors during classes.

### **Plagiarism and academic integrity**

The Department of Obstetrics and Gynecology No.2 maintains zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first classes will provide information on what to consider plagiarism and how to properly conduct scientific research.

### **Recommended references** **Basic**

1. Obstetrics and Gynecology: In two volumes. – Volume 1: Акушерство-Obstetrics: textbook/ Group of authors, Edited by V.I. Gryshchenko, M.O.Shcherbina. – K.: AUS Medicine Publishing, 2014. – 392 p.
2. Obstetrics By Ten Teachers: Edited by Geoffrey Chamberlain. - Seventeenth Edition. – Co-published in the USA by Oxford University Press, Inc., New York, 2004. – 284 p.
3. Ovcharenko O., Lyaschenko O., Safonov R. Gynecological laparoscopy : methodology guidelines for students Kharkiv : KNMU, 2017.- 46 p.

4. Mengaglia Luca et al. Manual of gynecological laparoscopic surgery II Edition. – Sraub Druck+Medien AG, 78713 Schramberg Germany. - 2008.– 253 p.

### **Information resources**

All-Ukrainian electronic library [http://youalib.com/medicine/obstetrics- and-gynecology](http://youalib.com/medicine/obstetrics-and-gynecology)

Textbooks of medicine <http://www.ex.ua/74367524>

KhNMU repository <http://repo.knmu.edu.ua>

Official site of the testing center <https://testkrok.org.ua/>