MINISTRY OF HEALTH OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY

Department of Obstetrics and Gynecology

CONFIRMED by
Vice-rector for scientific and pedagogical work
_____ Eduard BURIACHKIVSKYI
September 1st, 2024

WORK PROGRAM ON ELECTIVE DISCIPLINE

"ENDOSCOPIC TECHNOLOGIES IN OBSTETRICS AND GYNECOLOGY"

Level of higher education: second (master's)

Branch of knowledge: 22 "Health care"

Specialty: 222 «Medicine»

Educational and professional program: «Medicine»

2024

The work program is based on the educational and professional program "Medicine" fo the training of specialists of the second (master's) level of higher education in the specialty 22 "Medicine" in the field of knowledge 22 "Health care", approved by the Academic Council o ONMedU (Protocol No. 10 of June 27, 2024).

Developers:
Head of the Department, Doctor of Medicine, Prof. Gladchuk I.Z.
Head of the Department, Doctor of Medicine, Professor Volyanska A.G.,
Ph.D., as. Lunko T.A.

The program was discussed at the meeting of the Obstetrics and Gynecology Department 29.08.2024, protocol № 1.

Head of the Department _____ Igor GLADCHUK

Approved by the guarantor of
the educational and professional program _____ Valeriia MARICHEREDA

Approved by the subject-cycle methodological commission on surgical disciplines of ONMedU
Protocol № 1 dated 30. 08. 2024

Head of the subject-cycle methodological commission for humanities of ONMedU

_____ Vasyl MISHCHENKO

Revised and approved at the meeting of the Department of Obstetrics and Gynecology
Protocol № _____ dated __/__/20__.

Head of the department _____

Revised and approved at the meeting of the Department of Obstetrics and Gynecology
Protocol № _____ dated __/__/20__.

Head of the department _____

1. Description of the discipline

Name of indicators	Branch of knowledge, specialty, specialization, level of higher education	Characteristics of the discipline
Total quantity: Credits: 3,0 Hours: 90	Field of study 22 "Health care" Speciality 222 "Medicine" Level of higher education second (master's**)**	*Full-time education* *Elective discipline*
		Year of preparation: 6
		Semesters XI – XII
		Lectures (0 hours)
		Seminary (0 year)
		Practical (30 hours)
		Laboratory classes (0 hours)
		Independent work (60 hours)
		including individual tasks (0 hours)
		Form of final control – test credit

2. The purpose and tasks of the educational discipline, competences, program learning outcomes.

Purpose: consolidation and deepening of theoretical knowledge obtained by students in the process of studying the discipline, the formation of elements of professional competencies, the development of skills and abilities in the discipline "obstetrics and gynecology".

Task:

1. Practical training of students with the use of modern equipment, including simulation.
2. Mastering the basic technique of endosurgical interventions in obstetrics and gynecology.

The process of studying the discipline is aimed at the formation of elements of the following competencies**:**

General (GC**):**

GC1 – Ability to abstract thinking, analysis and synthesis.
GC3 – Ability to apply knowledge in practical situations.
GC4 – Knowledge and understanding of the subject area and understanding of professional activity.
GC5 – Ability to adapt and act in a new situation.
GC6 – Ability to make informed decisions.
GC7 – Ability to work in a team.
GC8 – Ability to interpersonal interaction.
GC11–Ability to search, process and analyze information from various sources.
GC12 – Certainty and perseverance regarding the tasks and responsibilities taken.
GC16 - Ability to assess and ensure the quality of work performed

Special (SC):

SC1 – Ability to collect medical information about the patient and analyze clinical data.
SK2 – Ability to determine the required list of laboratory and instrumental studies and evaluate their results.
SC6 – Ability to determine the principles and nature of treatment and prevention of diseases.
SC7 – Ability to diagnose emergencies.
SC 10 – Ability to perform medical manipulations.
SC 16 – Ability to maintain medical records, including electronic forms.

Programmatic learning outcomes (PLO):

PLO1 - Have a thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integrating knowledge. Be responsible for professional development, the ability to further vocational training with a high level of autonomy.
PLO2 - Understanding and knowledge of fundamental and clinical biomedical sciences, at a level sufficient to solve professional problems in the field of health care.
PLO3 - Specialized conceptual knowledge, including scientific achievements in the field of health care and is the basis for research, critical understanding of problems in the field of medicine and related interdisciplinary problems, including an early intervention system.
PLO5 - Collect complaints, anamnesis of life and disease, assess the patient's psychomotor and physical development, the state of organs and body systems, evaluate information on the diagnosis based on the results of laboratory and instrumental studies (list 4), taking into account the age of the patient.
PRN6 - Establish a final clinical diagnosis by making an informed decision and analyzing the obtained subjective and objective data of clinical, additional examination, conducting differential diagnostics, adhering to the relevant ethical and legal norms, under the supervision of a doctor-head in a health care institution (list 2).
PLO 7 - Assign and analyze additional (mandatory and optional) methods of examination (laboratory, functional and / or instrumental) (list 4), patients with diseases of organs and body systems for differential diagnosis of diseases (list 2).
PLO 8 - To determine the main clinical syndrome or symptom that causes the severity of the condition of the victim / victim (list 3) by making an informed decision on the human condition under any circumstances (in a health care institution, beyond), including in an emergency situation and hostilities, in the field, in conditions of lack of information and limited time.
PLO 9 - To determine the nature and principles of treatment of patients (conservative, surgical) with diseases (list 2), taking into account the age of the patient, in a health care institution, outside it and at the stages of medical evacuation, including in the field, on the basis of a preliminary clinical diagnosis, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes, if necessary, expanding the standard scheme be able to substantiate personalized recommendations under the supervision of a doctor-head in a medical institution.
PLO17 - Perform medical manipulations (list 5) in a medical institution, at home or at work on the basis of a preliminary clinical diagnosis and / or indicators of the patient's condition by making an informed decision, adhering to the relevant ethical and legal standards.
PLO21 - Find the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.
PLO 24. Organize the necessary level of individual safety (own and caregivers) in case of typical dangerous situations in the individual field of activity.

As a result of studying the discipline, the students should:

Know:

- Basic principles of endoscopic methods of diagnostic and treatment in obstetrics and gynecology.

Be able to:

- Collect data on patient complaints, history of the disease, history of life.
- Evaluate information on the diagnosis using the standard procedure, based on the results of laboratory and instrumental studies.
- Determine the list of necessary clinical, laboratory and instrumental studies and evaluatetheir results (list 4).
- Isolate the leading clinical withimpt or syndrome (list 1).

- Establish a preliminary diagnosis, carry out differential diagnosis and determine the clinical diagnosis of the disease (list 2).
- Determine the principles of treatment of diseases, the necessary mode of work and rest, the nature of nutrition (list 2).
- Diagnose emergencies (list 3).
- Use the skillsof communication and clinical examination of the patient.
- Perform medical manipulations (list 5).
- Maintain medical records.

Contents of the course

Topic 1. **Hysteroscopy in the diagnosis of gynecological pathology.** Hyperplastic processes of the endometrium. Submucous uterine fibroids. Intrauterine membrane. Intrauterine synechiae.

Topic 2. Hysteroscopy is operative. Indications and technique. Polypectomy. Myomectomy. Endometrial resection. Synechyolysis.

Topic 3. **Diagnostic laparoscopy.** Endoscopic clinical anatomy of the pelvic organs. Indications and technique

Topic 4. **Operative laparoscopy in the treatment of female infertility and CPPS.** Causes of female infertility and chronic pelvic pain syndrome (CPPS). Salpingoovariolysis. Salpingotomy. Excision of endometrioid heterotopies. Chromohydrotubation.

Topic 5. Operative laparoscopy in emergency conditions in gynecology. Ectopic pregnancy, ovarian apoplexy. Clinic, diagnosis, tactics of management. Emergency care. Preoperative preparation and postoperative management of gynecological patients.

Topic 6. Operative laparoscopy for benign tumors of the female genital organs. Tumors and tumor-like formation of uterine applications. Ovariectomy. Ovarian resection. Tubectomy. Adnexectomy. Uterine fibroids. Conservative myomectomy. Hysterectomy. Indications for conducting, technique of execution.

Topic 7. Endoscopy in obstetrics. Use of endoscopic technologies in feto-fetal transfusion syndrome, immunoconflict, fetal retardation, fetal malformations. Fetoscopy, chorion biopsy, amniocentesis, placentocentesis, cordocentesis and fetal skin biopsy. Pregnancy and ovarian tumors. Indications and features of the technique of operative laparoscopy during pregnancy.

Topic 8. Colposcopy in the diagnosis of cervical pathology.

Precancerous diseases of the cervix: classification. Simple and advanced colposcopy. Principles of conduct. Colposcopy during pregnancy. Features of the condition of the cervix during pregnancy. Differential colposcopic diagnosis: cervical deciduosis, cervical cancer.

4. The structure of the discipline.

Topic titles	Number of hours					
	Total	Including				
		Lecture	Seminars	Practical classes	Laboratory classes	Independent work
Topic 1. Hysteroscopy in the diagnosis of gynecological pathology**.**	12	0	0	4	0	8
Topic 2. Hysteroscopy	12	0	0	4	0	8

operative						
Topic 3. Diagnostic laparoscopy	6	0	0	4	0	2
Topic 4. Operative laparoscopy in the treatment of female infertility and CPPS..	12	0	0	4	0	8
Topic 5. Operative laparoscopy in emergency conditions in gynecology**.**	12	0	0	4	0	8
Topic 6. Operative laparoscopy for benign tumors of the female genital organs.	12	0	0	4	0	8
Topic 7. Endoscopy in obstetrics	12	0	0	2	0	10
Topic 8. Colposcopy in the diagnosis of cervical pathology.	12	0	0	4	0	8
Total	90	0	0	30	0	60

5. Topics of lectures / seminaries/ practical / laboratory classes

5.1. Topics of lectures.
Lectures are not provided.

5.2. Topics of seminars.
Ceminar classes are not provided.

5.3. Topics of practical classes.

№	**Topic**	**Number Hours**
1.	Topic 1. Practical lesson 1. Hysteroscopy in the diagnosis of gynecological pathology. Hyperplastic processes of the endometrium.	2
2	Topic 1. Practical Lesson 2. Hysteroscopy in the diagnostics of gynecological pathology. Submucous uterine fibroids. Intrauterine membrane. Intrauterine synechiae.	2
3.	Topic 2. Practical lesson 3. Operative hysteroscopy. Indications and technique. Polypectomy. Myomectomy.	2
4	Topic 2. Practical lesson 4. Operative hysteroscopy. Endometrial resection. Synechyolysis.	2
5.	Topic 3. Practical lesson 5. Diagnostic laparoscopy. Endoscopic clinical anatomy of the pelvic organs.	2
6.	Topic 3. Practical lesson 6. Diagnostic laparoscopy. Indications and technique	2
7.	Topic 4. Practical lesson 7. Operative laparoscopy in the treatment of female infertility	2

	and CPPS. Causes of female infertility and CPPS.	
8.	Topic 4. Practical lesson 8. Salpingoovariolysis. Salpingotomy. Excision of endometrioid heterotopies. Chromohydrotubation	2
9.	Topic 5. Practical lesson 9. Operative laparoscopy for emergency conditions in gynecology. Ectopic pregnancy, Clinic, diagnosis, management tactics. Emergency care.	2
10.	Topic 5. Practical lesson 10. Ovarian apoplexy. Clinic, diagnosis, tactics of management. Emergency care. Preoperative preparation and postoperative management of gynecological patients	2
11.	Topic 6. Practical lesson 11. Operative laparoscopy for benign tumors of the female genital organs. Tumors and tumor-like formations of uterine applications. Ovarioectomy. Resection of the ovary. Tubectomy. Adnexectomy.	2
12.	Topic 6. Practical lesson 12. Uterine fibroids. Conservative myomectomy. Hysterectomy. Indications for implementation, technique.	2
13.	Topic 7. Practical lesson 13. Endoscopy in obstetrics. The use of endoscopic technologies in feto-fetal transfusion syndrome, immune conflict, fetal retardation, fetal malformations. Fetoscopy, chorion biopsy, amniocentesis, placentocentesis, cordocentesis and fetal skin biopsy. Pregnancy and ovarian tumors. Indications and features of the technique of operative laparoscopy during pregnancy.	2
14.	Topic 8. Practical lesson 14. Colposcopy in the diagnosis of cervical pathology. Precancerous diseases of the cervix: classification. Simple and advanced colposcopy. Principles of conduct.	2
15.	Topic 8. Practical lesson 15. Colposcopy during pregnancy. Features of the condition of the cervix during pregnancy. Differential colposcopic diagnosis: cervical deciduosis, cervical cancer.	2

5.4. Topics of laboratory classes
Laboratory classes are not provided**.**

6. Independent work of the students

№	**Types of SIW**	**Number of hours**
1	Topic 1. Preparation for practical classes 1-2	8
2	Topic 2. Preparation for practical classes 3-4	8
3	Topic 3. Preparation for practical classes 5-6	2
4	Topic 4. Preparation for practical classes 7-8	8
5	Topic 5. Preparation for practical classes 9-10	8
6	Topic 6. Preparation for practical classes 11-1 2	8
7	Topic 7. Preparation for practical classes 13	10
8.	Topic 8. Preparation for practical classes 14-15	8
	Total hours	**60**

7. Teaching methods

Practical classes: solving clinical situational problems, instructing and working out methods for performing endosurgical interventions on simulation dummies.

Independent work: independent work with the recommended basic and additional

literature, with electronic information resources.

8. Forms of control and evaluation methods
(including criteria for evaluating learning outcomes)

Current control: oral questioning, demonstration of medical manipulations, solution of situational clinical tasks, evaluation of activity in the classroom.

Final control: credit.

Evaluation of current academic activities in a practical lesson:

1. Evaluation of theoretical knowledge on the topic 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. Assessment of practical skills and manipulations on the topic of the lesson:
   - Methods: assessment of the correctness of practical skills
   - The maximum score is 5, the minimum score is 3, the unsatisfactory score IS 2.
3. Evaluation of work with patients on the topic of the lesson:
   - methods: assessment of: a) communication skills of communication with the patient, b) the correctness of the appointment and evaluation of laboratory and instrumental studies, c) compliance with the examination algorithm, d) justification of the clinical diagnosis, e) drawing up a treatment plan;
   - The maximum score is 5, the minimum score is 3, the unsatisfactory score IS 2.

The score for one practical lesson is the arithmetic average for all components and can only have an integer value (5, 4, 3, 2), which is rounded according to the method of statistics.

Criteria for the current assessment in a practical lesson

Rating	Criteria assessment
«5»	The student is fluent in the material, takes an active part in the discussion and solution of a situational clinical problem, confidently demonstrates practical skills during the examination of a sick woman and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
«4»	The student is well versed in the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
«3»	The student does not have enough knowledge of the material, uncertainly participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental studies with significant errors.
«2»	The student does not own the material, does not participate in the discussion and solution of a situational clinical problem, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.

Credit is given to the student who completed all tasks of the work program of the academic discipline, took an active part in practical classes, completed and defended an individual assignment and has an average current grade of at least 3.0 and has no academic debt. Assessment is carried out: at the last lesson before the beginning of the examination session - with the tape system of learning, at the last lesson - with the cycle system of learning. The credit

score is the arithmetic mean of all components according to the traditional four-point scale and has a value that is rounded according to the statistics method with two decimal places after the decimal point.

9. Distribution of points received by students

The obtained average score for the academic discipline for students who have successfully mastered the work program of the academic discipline is converted from a traditional four-point scale to points on a 200-point scale, as shown in the table:

Conversion table of a traditional assessment into a multi-point scale

National assessment for the discipline	The sum of points for the discipline
Perfect «5»	185 – 200
Good «4»	151 – 184
Satisfactory «3»	120 – 150
Unsatisfactory «2»	<120

A multi-point scale (200-point scale) characterizes the actual success of each applicant in learning the educational component. The conversion of the traditional grade (average score for the academic discipline) into a 200-point grade is performed by the information and technical department of the University. According to the obtained points on a 200-point scale, the achievements of the students are evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows you to evaluate the achievements of students from the educational component who are studying in the same course of the same specialty, according to the points they received. The ECTS scale is a relative-comparative rating, which establishes the applicant's belonging to the group of better or worse among the reference group of fellow students (faculty, specialty). An "A" grade on the ECTS scale cannot be equal to an "excellent" grade, a "B" grade to a "good" grade, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" according to the ECTS scale do not coincide with the limits of grades "5", "4", "3" according to the traditional scale. Acquirers who have received grades of "FX" and "F" ("2") are not included in the list of ranked acquirers. The grade "FX" is awarded to students who have obtained the minimum number of points for the current learning activity, but who have not passed the final examination. A grade of "F" is assigned to students who have attended all classes in the discipline, but have not achieved a grade point average (3.00) for the current academic activity and are not admitted to the final examination. Students who study in one course (one specialty), based on the number of points scored in the discipline, are ranked on the ECTS scale as follows: Conversion of the traditional grade from the discipline and the sum of points on the ECTS scale

Conversion of traditional assessment in the discipline and the amount of points on the ECTS scale

Assessment on the ECTS scale	Statistical indicator
A	The best 10% of students
B	The next 25% of students
C	The next 30% of students
D	The next 25% of students
E	The next 10% of students

10. Methodological support

- Work program of the discipline
- Syllabus
- Methodical developments for practical classes

- Materials for independent work of students
- Multimedia presentations
- Situational clinical tasks

11. List of theoretical questions to prepare for the test

1. Hysteroscopy in the diagnosis of gynecological pathology.
2. Hysteroscopy. Indications and technique.
3. Hysteroscopy in the diagnosis and treatment of endometrial hyperplastic processes.
4. Hysteroscopy in the diagnosis and treatment of submucosis uterine fibroids.
5. Hysteroscopy in the diagnosis and treatment of intrauterine membrane and intrauterine synechiae.
6. Diagnostic laparoscopy. Endoscopic clinical anatomy of the pelvic organs.
7. Diagnostic laparoscopy. Indications and technique.
8. Operative laparoscopy in the treatment of female infertility.
9. Operational laparoscopy at SXTB.
10. Operative laparoscopy in emergency conditions in gynecology. Ovarian apoplexy.
11. Operative laparoscopy in emergency conditions in gynecology. Ectopic pregnancy.
12. Operative laparoscopy forpuchlins of uterine applications.
13. Operative laparoscopy for uterine fibroids.
14. Endoscopy in obstetrics.
15. Pregnancy and ovarian tumors. Indications and technique of operative laparoscopy during pregnancy.
16. Fetoscopy, chorion biopsy, amniocentesis, placentacentesis, cordocentesis and fetal skin biopsy.
17. Pregnancy and ovarian tumors. Indications and features of the technique of operative laparoscopy during pregnancy.
18. Colposcopy in the diagnosis of cervical pathology.
19. Simple and advanced colposcopy.
20. Features of the condition of the cervix during pregnancy. Colposcopy during pregnancy.
21. Preoperative preparation and postoperative management of gynecological patients after endosurgical interventions.

12. Recommended literature

Basic:

1. Obstetrics: student's book = Акушерство: підручник / Gladchuk I.Z., Ancheva I.A. Vinnytsia: Nova Knyga, 2021. –288 p.
2. Obstetrics and Gynecology: in 2 vol.:textbook. Volume 2. Gynecology / V.I. Gryshchenko, M.O. Shcherbina, B.M. Ventskivskyi et al.; edited by V.I. Gryshchenko, M.O. Shcherbina. — 3th edition. – K.: AUS Medicine Publishing, 2022 – 352 p.
3. Oats, Jeremy Fundamentals of Obstetrics and Gynaecology [Text]: Liewellyn-Jones Fundamentals of Obstetrics and Gynaecology / J. Oats, S. Abraham. – 10th ed. – Edinburgh [etc.]: Elsevier, 2017. – VII, 375 p.
4. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology (10th Ed). Jeremy Oats, Suzanne Abraham. Elsevier. 2016. – 384 pp.
5. Dutta, Durlav Chandra. D. C. Dutta's Textbook of Gynecology including Contraception / D.C. Dutta; ed/ Hiralal Konar. – 7th.ed. – New Delhi: Jaypee Brothers Medical Publishers, 2016. – XX, 574 p.

Additionally:

1. 2011 IFCPC Colposcopic Terminology. Clarification on practical use.- K.. -"Polygraph Plus", 2018.- 62 p.
2. Modern technical teaching aids (see appendix to the work program of the 4th year) Prevention of purulent-septic complications during laparoscopic surgeries on pelvic organs with the risk of vaginal microbiota contamination / Zaporozhan VN, Gladchuk IZ, Rozhkovska NM, Volyanska AG, Shevchenko OI //World of Medicine and Biology.- 2020- #1(71). - P.49- 53. (Web of science)
3. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology (10th Ed). Jeremy Oats, Suzanne Abraham. Elsevier. 2016. – 384 pp.
4. Oats, Jeremy Fundamentals of Obstetrics and Gynaecology [Text]: Liewellyn-Jones Fundamentals of Obstetrics and Gynaecology / J.Oats, S.Abraham. – 10th ed. – Edinburgh [etc.]: Elsevier, 2017. – VII, 375 p.
5. Active " Clinical protocols ", approved by the order of the Ministry of Health of Ukraine for Obstetrics and Gynecology

13. Electronic information resources

1. https://www.cochrane.org/- Cochrane / Cochrane Library
2. https://www.acog.org/- The American College of Obstetricians and Gynecologists
3. https://www.uptodate.com– UpToDate
4. https://online.lexi.com/- Wolters Kluwer Health
5. https://www.ncbi.nlm.nih.gov/- National Center for Biotechnology Information / National Center for Biotechnology Information
6. https://pubmed.ncbi.nlm.nih.gov/- International Medical Library / National Library of Medicine
7. https://www.thelancet.com/- The Lancet
8. https://www.rcog.org.uk/- Royal College of Obstetricians & Gynecologists
9. https://www.npwh.org/- Nurse practitioners in women's health
10. http://moz.gov.ua- Ministry of Health of Ukraine
11. www.ama-assn.org– American Medical Association /American Medical Association
12. www.who.int- World Health Organization
13. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
14. http://bma.org.uk– British Medical Association
15. www.gmc-uk.org- General Medical Council (GMC)
16. www.bundesaerztekammer.de– German Medical Association
17. www.euro.who.int- European Regional Office of the World Health Organization