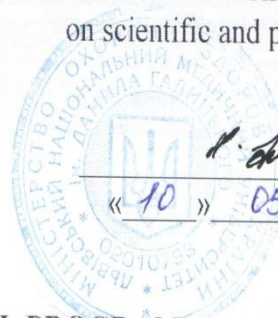


LVIV NATIONAL MEDICAL UNIVERSITY  
named after DANYLO HALYTSKY

Department of Obstetrics and Gynecology

“APPROVE”

The first vice-rector  
on scientific and pedagogical work  
Iryna Soloninko



« 10 » 05 2023

**EDUCATIONAL PROGRAM**

**ББ 3.2 Individual profile course : «Surgery»**

**ББ 3.2.4. Obstetrics and gynecology including operative gynecology**

Training of specialists of the second (master's) level of higher education in the field of knowledge 22 "Health"


Specialty 222 "Medicine" .

Individual profile course of your choice: Surgery

Faculty, course: medical faculty, 6th year

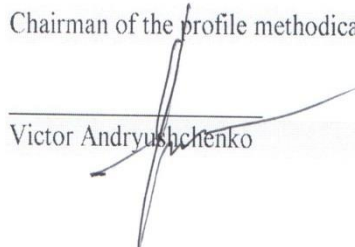
Discussed and approved  
at a meeting of the department  
obstetrics and gynecology  
Protocol № 6/97  
from "31 " 03 2023

Head of Department

  
Leonid Markin

Approved  
profile methodical commission  
in surgical disciplines  
Protocol № 20  
from "27 " 04 2023

Chairman of the profile methodical commission

  
Victor Andryushchenko

Lviv 2023

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Lviv 2023

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Changes and additions to the curriculum for the 2023-2024 academic year

<b>№</b>	<b>Contents of changes (additions)</b>	<b>Date and Protocol № of the department meeting</b>	<b>Notes</b>
1.	The list of recommended literature has been updated by modern sources in Ukrainian and English	Protocol No. 6/97 from "31" March 2023	

Head of Department  
MD, Corresponding Member NAMS of Ukraine,  
prof. L.B. Markin

## INTRODUCTION

### **Program of academic discipline Obstetrics and Gynecology**

According to the Standard of Higher Education of the Second (Master's) Level 22  
«Health Care»  
Specialties 222 "Medicine"  
Master of Medicine Educational Program

#### **I. Description of the subject of discipline.**

The subject direction of the discipline is to obtain knowledge of the compulsory discipline of professional training "Obstetrics and gynecology", the study of which is necessary for successful professional activities. The subject direction of the program is the study of physiological and pathological processes that occur in the woman's body, associated with conception, pregnancy, childbirth and postpartum period and gynecological diseases, the program is focused on obtaining knowledge about the physiological and pathological course of these conditions, the formation of practical skills and skills.

Structure of the discipline	Number of hours, including				Year of study Semester	Type of control
	Total	Classroom		SIW		
		Lectures	Practical classes			
In just 6 years of study	135 hours / 4,5 ESTS credits	-	68	67	6 XI-XII	Credit

**The** subject of the study of the discipline is "Obstetrics and gynecology" The discipline program "Obstetrics and gynecology" is structured in to sections.

Types of educational activities of students according to the curriculum are: a) practical classes; b) independent work of students.

Practical classes last 6 hours. According to the methodology of the organization, they are clinical, aimed at controlling the assimilation of theoretical material and the formation of practical skills, as well as the ability to analyze and apply the acquired knowledge to solve practical problems.

The assimilation of the topic is controlled in practical classes according to specific goals.

The list of criteria for the provision of obstetric and gynecological care is regulated by the relevant protocols in the specialty "Obstetrics and gynecology" of the Ministry of Health of Ukraine.

Means of control are test tasks, clinical situational tasks; control of practical skills.

Independent work of the student is one of the organizational forms of study, regulated by the work curriculum and carried out by the student independently outside the classroom classes. Considered only in terms of independent work of the student: curation of a pregnant or gynecological patient and writing a history of the disease, search and study of additional literature, creation of algorithms, structural and logical schemes, writing abstracts, annotations, reports for speaking with messages in practical classes, duty in the clinic outside the study time.

Individual assignment is a form of organization of training in order to deepen, summarize and consolidate the knowledge that students receive in the learning process, as well as the application of this knowledge in practice, that is, an individual educational and research task.

Control of the assimilation of the discipline is carried out upon its completion at the final control lesson (test).

The assessment of the student's success in the discipline is rated and is set on a traditional scale.

The Departments of Obstetrics and Gynecology have the right to make changes to the curriculum within 15% of the time allocation depending on the directions of scientific research, organizational and diagnostic capabilities of clinical bases, but are obliged to fulfill in general the scope of requirements in the academic discipline "Obstetrics and gynecology" (IV-VI courses) in accordance with the ultimate goals of EQCh and EPP in terms of training and curriculum.

### **Interdisciplinary connections :**

«Obstetrics and Gynecology" as an academic discipline is based on the knowledge gained by students in the study of medical biology, normal and pathological anatomy, topographic anatomy, normal and pathological physiology of the reproductive system of a woman, histology and embryology, microbiology, pharmacology, clinical genetics, internal professional and infectious diseases, surgical diseases, hygiene, social medicine, organization and economics health protection and integrates with these disciplines.

#### **1. The purpose and objectives of the discipline**

1.1. **The purpose** of teaching the discipline "Obstetrics and gynecology" is: acquisition of knowledge on physiological and pathological obstetrics, conservative and operative gynecology, assimilation of general principles of pregnancy, childbirth and postpartum period, ability to analyze the obstetric situation and surgical risks of gynecological patient, use basic and additional research methods, demonstrate skills according to educational and professional program.

1.2. **The main tasks of studying the discipline** "obstetrics and gynecology":

- Interpret the clinical anatomy of the female genitalia and the physiology of the reproductive system.
- Make a preliminary diagnosis of the main gynecological diseases, plan the examination and tactics of keeping the patient.

- Identify etiological and pathogenetic factors of the main diseases of the female reproductive system.
- Identify factors affecting family planning and develop activities aimed at rational family planning.
- Plan pregnancy tactics, physiological childbirth and the postpartum period.
- Make a preliminary diagnosis of complications of pregnancy, childbirth and the postpartum period.
- Perform the necessary medical manipulations.
- Plan and provide emergency care in obstetrics and gynecology.

In accordance with the requirements of the educational and professional program, students must:

**know:**

- the course of physiological and pathological pregnancy, childbirth and the postpartum period;
- modern standards of assistance in emergency obstetric and gynecological pathology;
- family planning issues.

**be able to:**

- conduct gynecological research, take material for cytological, histological and bacteriological research and be able to interpret them;
- establish a diagnosis of the disease, conduct differential diagnostics, therapy, prevention and rehabilitation of obstetric and gynecological patients;
- collect and evaluate obstetric and gynecological history;
- conduct external and internal obstetric examination, assess the condition of the fetus and newborn;
- provide emergency care for obstetric and gynecological pathology.

### 1.3 Competences and learning outcomes

It lays the foundations for the formation of students' skills, which are determined by the ultimate goals of studying obstetrics and gynecology as an independent discipline and can be used by students to logically justify the diagnosis of the disease, conduct differential diagnosis, therapy, prevention and rehabilitation of patients, the ability to provide medical care in emergency conditions in the work of a general practice.

In accordance with the requirements of the Standard of Higher Education, discipline ensures that students acquire **competencies**:

**General:**

GK 1.	Ability to abstract thinking, analysis and synthesis.
GK 2.	Ability to learn and master modern knowledge.
GK 3.	Ability to apply knowledge in practical situations.

GK 4.	Knowledge and understanding of the subject area and understanding of professional activity.
GK 5.	Ability to adapt and act in a new situation.
GK 6.	Ability to make informed decisions.
GK 7.	Ability to work in a team.
GK 8.	Ability to interpersonal interaction.
GK 9.	Ability to communicate in a foreign language.
GK 10.	Ability to use information and communication technologies.
GK 11.	Ability to search, process and analyze information from various sources.
GK 12.	Definiteness and perseverance in terms of tasks and responsibilities.
GK 13.	Awareness of equal opportunities and gender issues.
GK 14.	The ability to exercise own rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human rights and freedoms and the citizen of Ukraine.
GK 15.	Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies. active recreation and leading a healthy lifestyle.

*- Special (professional, subject) (PC):*

PC 1.	Ability to collect medical information about the patient and analyze clinical data.
PC 2.	Ability to determine the required list of laboratory and instrumental studies and evaluate their results.
PC 3.	Ability to establish a preliminary and clinical diagnosis of the disease.
PC 4.	Ability to determine the required mode of work and rest in the treatment of diseases.
PC 5.	Ability to determine the nature of nutrition in the treatment and prevention of diseases.
PC 6.	Ability to determine the principles and nature of treatment and prevention of diseases.
PC 7.	Ability to diagnose emergencies.
PC 8.	Ability to determine the tactics of emergency medical care.
PC 9.	Ability to carry out medical and evacuation measures.
PC 10.	Ability to perform medical manipulations.
PC 11.	Ability to solve medical problems in new or unfamiliar environments with incomplete or limited information, taking into account aspects of social and ethical responsibility.
PC 12.	Ability to determine the tactics of physiological pregnancy, physiological childbirth and the postpartum period. Family planning and contraceptive counseling skills.
PC 13.	Ability to carry out sanitary and hygienic and preventive measures.
PC 14.	Ability to conduct a performance examination.
PC 15.	Ability to keep medical records, including electronic forms.
PC 16.	Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.
PC 17.	Ability to analyze the activities of a doctor, department, health care facility, ensure the quality of medical care and improve the efficiency of medical resources.
PC 18.	To communicate one's knowledge, conclusions and arguments on health issues and

	related issues to specialists and non-specialists. In particular to persons as they study.
PC 19.	Ability to develop and implement scientific and applied projects in the field of health care.
PC 20.	Adherence to ethical principles when working with patients, laboratory animals.
PC 21.	Adherence to professional and academic integrity, be responsible for the accuracy of scientific results.

### Competence matrix

№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
1	2	3	4	5	6
<b>Integral competence</b>					
Ability to solve complex problems, including research and innovation in medicine. The ability to continue learning with a high degree of autonomy.					
<b>General competencies</b>					
1	Ability to abstract thinking, analysis and synthesis.	Know ways analysis, synthesis and further modern teaching	Be able to analyze information, take informed solution, be able to acquire modern knowledge	Set appropriate connections to achieve goals	Carry responsibility for timely acquiring modern knowledge
2	Ability to learn and master modern knowledge.	Know modern industry development trends and analyze them	Be able to analyze professional information, accept reasonable solutions, to acquire modern knowledge	Set appropriate connections to achieve goals	Carry responsibility for the timely acquisition of modern knowledge
3	Ability apply knowledge in practical situations	Have specializing in conceptual knowledge, acquired in the learning process	Be able to solve complex tasks and problems that arise in the activity	Understandable and unambiguous reporting of their own conclusions, knowledge and explanations that justify them to specialists and non-specialists	Be responsible for decision-making in difficult conditions
4	Knowledge and understanding of the subject area and understanding of professional activity	Know the principles of planning, know the requirements for the timing of a particular action	Be able to consistently perform your actions in accordance with the requirements for the deadlines of their implementation	Set appropriate links to achieve result	Be responsible for the appropriate procedure and timing of actions



5	Ability to adapt and act in a new situation.	Have knowledge of structure of adapt and act in a new situation.	Be able to carry out adapt and act in a new situation.and integrating knowledge	Ability effectively form communication strategy in professional activity	Bear responsibility for professional development, ability to further professional training with a high level of autonomy
6	Ability to make informed decisions	Have knowledge in in the field of information and communications, technologies that applied in professional activity	Be able to use information and communication technologies in the professional field that needs updating and integrating knowledge	Use information and communication technologies in professional activity	Be responsible for the development of professional knowledge and skills.
7	Ability to work in a team.	Have knowledge in in the field of information and communications, technologies that applied in professional activity	Be able to use information and communication technologies in the professional field that needs updating and integrating knowledge	Use information and communication technologies in professional activity	Be responsible for the development of professional knowledge and skills
8	Ability to interpersonal interaction.	Know of tactics is a strategist communication, laws and methods communicative behavior	Be able to make a reasonable decision, choose ways and strategies of communication for ensuring effective teamwork	Use strategies communication and skills interpersonal interaction	Be responsible for choice and tactics method of communication that ensures decision making
9	Ability to communicate in a foreign language.	Know the tactics and strategies of communication in a foreign language	Be able to choose ways that strategist communication for ensuring effective teamwork	Use communication strategies	Be responsible for choice and tactics of method of communication
10	Ability to use information and communication technologies.	Know to use information and communication technologies.	Be able to choose ways to use information and communication technologies.	Use skills of interpersonal interaction	Be responsible for choice and tactics method of communication
11	Ability to search, process and analyze information from various sources	Know the responsibilities and ways to set the tasks	Be able to determine the purpose and objectives, be persistent and conscientious in the performance of their duties	Establish interpersonal relationships to effectively perform task and responsibilities	Be responsible for the quality of the tasks
12	Definiteness and perseverance in terms of tasks and responsibilities	Know the problems of environmental protection	Be able to form opportunities for themselves and others to preserve	Make proposals to the relevant authorities on conservation	Be responsible for the implementation of conservation

			the environment	measures the environment	the environment measures within its competence
13	Awareness of equal opportunities and gender issues	Know the basic ethics and deontology	Be able to apply ethical and deontological norms and principles at the professional activity	Ability to convey to patients, family members, colleagues their professional position	Be responsible for ethical and deontological norms and principles at the professional activity
14	The ability to exercise own rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human rights and freedoms and the citizen of Ukraine.	Know the rules of writing and use the Ukrainian language to communicate with patients	Be able to communicate in Ukrainian with patients and colleagues	Use the Ukrainian language for documentation	Be responsible for non-compliance with the law on the state language
15	Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies. active recreation and leading a healthy lifestyle.	Know to use information and communication technologies.	Be able to choose ways to use information and communication technologies.	Use foreign languages when communicating with patients from other countries	Be responsible for the development of professional knowledge and skills

**Special (professional, subject) competences**

1	Ability to collect medical information about the patient and analyze clinical data.	Know the possible complaints and the sequence of collecting information about the course of pregnancy, delivery, postpartum period	Be able to consistently collect information from the patient's words	The ability to establish interpersonal connection	Be responsible for the implementation of ethical and deontological norms
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2	Ability to determine the required list of laboratory and instrumental studies and evaluate their results.	Know the physical examination of pregnant, parturients, women in labor	Be able to perform all regulated methods of examination in the appropriate sequence and evaluate the results obtained	Ability to establish connection to patient under objective examination time	Carry responsibility for correctness holding and interpretation received results on objective examination patients
3	Ability to establish a preliminary and clinical diagnosis of the disease.	Have knowledge of the clinical course of pregnancy, childbirth, postpartum period	Be able to choose and to apply appropriate scale for the clinical course of pregnancy	Use information and communication technology on professional activities	Carry responsibility for interpretation of the results obtained when evaluating the clinical course of the disease
4	Ability to determine the required mode of work and rest in the treatment of diseases.	Have specialized knowledge about to determine the required mode of work and rest in the treatment of diseases.	Be able to analyze the results of determine the required mode of work and rest in the treatment of diseases.	The ability to convey to the patient and specialist conclusions on list and results research	Carry responsibility for timeliness carrying out relevant research and interpretations received results
5	Ability to determine the nature of nutrition in the treatment and prevention of diseases	Have knowledge of the clinical manifestations of the pathological course of pregnancy	Be able to make determine the nature of nutrition in the treatment and prevention of diseases	It is reasonable to form conclusions of results .	Be responsibility for timely determine the nature of nutrition in the treatment and prevention of diseases
6	Ability to determine the principles and nature of treatment and prevention of diseases.	Have knowledge of clinical manifestations and stages of development of conditions in obstetrics	Be able to detect and diagnose in obstetrics	Use communication strategies and interpersonal skills	Be responsible for the timely identification and assessment of the emergencies of the patient
7	Ability to diagnose emergencies	Have specialized knowledge of algorithms for the treatment of emergencies conditions in obstetrics	Be able to choose the necessary set of therapeutic measures in accordance with the disease	It is reasonable to bring to the patient and specialist conclusions about the complexity of treatment. Be able to record prescriptions in medical records.	Be responsible for the timely identification and assessment of the emergencies of the patient.

8	Ability to determine the tactics of emergency medical care.	Have knowledge of the tactics of emergency medical care.	Be able to examine the patient for the determine the tactics of emergency medical care.	It is reasonable to bring to the patient recommendations on the choice of emergency medical care.	Be responsible for the results of examinations .
9.	Ability to carry out medical and evacuation measures.	Have knowledge of the tactics to carry out medical and evacuation measures.	Be able to examine the patient for the determine the tactics.	Use communication strategies and interpersonal skills.	Be responsible for the results of examinations.
10	Performing medical manipulations (conduct examination of the mammary glands, speculum examination, bimanual examination, the bacteriological and bacterioscopic examination, cytological examination , conducting pelviometry, performing internal obstetric examination, auscultation of fetal heart beats, active management of the third period of delivery)	Have knowledge of the systems of the human body; knowledge of execution algorithms medical manipulations	Be able to perform medical procedures and manipulations according to algorithm	Reasoned formulate and bring to patients conclusions regarding necessity carrying out this or that medical	Carry responsibility for the quality of medical procedures and manipulations
11.	Ability to solve medical problems in new or unfamiliar environments with incomplete or limited information, taking into account aspects of social and ethical responsibility.	Have knowledge of clinical manifestations and stages of development of conditions in obstetrics	Be able to examine the patient for the determine the tactics	Use information and communication technology on professional activities	Carry responsibility for the quality of medical procedures and manipulations

12	Ability to determine the tactics of physiological pregnancy, physiological childbirth and the postpartum period. Family planning and contraceptive counseling skills.	Have specialized knowledge of about the course of pregnancy, delivery, postpartum period. Family planning and contraceptive counseling skills	Be able to organize the appropriate tactics of physiological pregnancy, physiological childbirth and the postpartum period in department of the maternity hospital	Be able to fill in appropriate medical documentation reporting on implementation of sanitary measures epidemiological regime in department of the maternity hospital	Carry responsibility for the accuracy of laboratory and instrumental research
13	Ability to carry out sanitary and hygienic and preventive measures.	Have specialized knowledge of carry out sanitary and hygienic and preventive measures.	Be able to organize the appropriate to carry out sanitary and hygienic and preventive measures in department of the maternity hospital	Be able to fill in appropriate medical documentation reporting on implementation of sanitary measures epidemiological regime in department of the maternity hospital	Carry responsibility for sanitary and hygienic and preventive measures.
14.	Ability to conduct a performance examination.	Know how to make the correct diagnosis	Be able to make a diagnosis based on medical history, laboratory and instrumental studies	It is reasonable to inform patients and specialists about conclusions on diagnosis	Carry responsibility for the preliminary and clinical diagnosis
15	Ability to keep medical records, including electronic forms.	Know how to complete medical records	Be able to fill in medical records correctly	Be able fill in appropriate medical documentation	Carry responsibility for the prescribed mode of work and rest in the treatment of the disease
16.	Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.	Know how to complete medical records	Be able to fill in medical records correctly	Be able fill in appropriate medical documentation	
17	Ability to analyze the activities of a doctor, department, health care facility, ensure the quality of medical care and improve the efficiency Of medical resources..	Know how to determine the tactics of management of patients who are the subject to dispensary supervision	Be able to choose the tactics of management of patients who are the subject to dispensary supervision.	Reasonably formulate and bring to patients, relatives and specialists the need for treatment of patients who are the subject to dispensary supervision.	Carry responsibility for timely prescribing of treatment to persons who are the subject to dispensary supervision
18	To communicate one's knowledge, conclusions and arguments on health issues and related issues to specialists and non-specialists. In	Know how to complete medical records	Be able to fill in medical records correctly	Be able fill in appropriate medical documentation	Be responsible for timely and truthful information

	particular to persons as they study.				
19	Ability to develop and implement scientific and applied projects in the field of health care.	Know how to determine the tactics of management of patients who are the subject to dispensary supervision	Be able to choose the tactics of management of patients who are the subject to dispensary supervision.	Reasonably formulate and bring to patients, relatives and specialists the need for treatment of patients who are the subject to dispensary supervision.	Carry responsibility for timely prescribing of treatment to persons who are the subject to dispensary supervision
20	Adherence to ethical principles when working with patients, laboratory animals.	Know how to conduct epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information	Be able to choose the tactics of epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information	Be able to conduct epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information	Be responsible for conducting epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information
21	Adherence to professional and academic integrity, be responsible for the accuracy of scientific results.	Know how to conduct activities for the organization and integration of medical care and marketing of medical services	Be able to choose the tactics of measures for the organization and integration of medical care and marketing of medical services	Be able to take measures to organize and integrate the provision of medical care to the population and marketing of medical services	Be responsible for the organization and integration of medical care and marketing of medical services

### Learning Outcomes:

PLO 1.	Have a thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integration of knowledge. Be responsible for professional development, the ability to further professional training with a high level of autonomy.
PLO 2.	Understanding and knowledge of basic and clinical biomedical sciences, at a level sufficient to solve professional problems in the field of health care.
PLO 3.	Specialized conceptual knowledge, which includes 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.
PLO 4.	Identify and identify the leading clinical symptoms or syndromes (according to list 1), according to standard methods, using preliminary history of the patient, examination data, knowledge about the person, his organs and systems. Establish a preliminary clinical diagnosis of the disease (according to list 2).

PLO 5.	Collect complaints, anamnesis of life and disease, assess the psychomotor and physical development of the patient, the condition of organs in body systems, based on the results of laboratory and instrumental studies to assess information about the diagnosis (list 4). Taking into account the patient's age.
PLO 6.	Evaluate information about the diagnosis using a standard procedure based on the results of laboratory and instrumental studies.
PLO 7.	Establish a final clinical diagnosis by making an informed decision and analysis of the obtained subjective and objective data of clinical, additional examination, differential diagnosis, adhering to the relevant ethical and legal norms, under the supervision of a physician-manager in a health care facility (list 2).
PLO 8.	Prescribe and analyze additional (mandatory and optional) methods of examination (laboratory, functional and/or instrumental) (according to list 4) of patients with diseases of organs and systems of the body for differential diagnosis of diseases (according to list 2). Carry out differential diagnosis of diseases. Establish a preliminary and clinical diagnosis.
PLO 9.	Determine the main clinical syndrome or the severity of the victim's condition (according to list 3) by making an informed decision and assessing the person's condition under any circumstances (in a health care facility, outside it), including in conditions of emergency and hostilities, in the field, in conditions of lack of information and limited time.
PLO 10.	Determine the nature and principles of treatment of patients (conservative, operative) with diseases (according to list 2), taking into account the age of the patient, in a health care facility, 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 on existing algorithms and standard schemes, if necessary to expand the standard scheme to be able to justify personalized recommendations under the supervision of a physician.
PLO 11.	Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.
PLO 12.	Determine the approach, plan and tactics of physiological pregnancy, physiological childbirth and the postpartum period by making an informed decision according to existing algorithms and standard schemes.
PLO 13.	Assess the general condition of the newborn child by making an informed decision according to existing algorithms and standard schemes, adhering to the relevant ethical and legal norms.
PLO 14.	Assess and monitor the child's development, provide recommendations for breastfeeding and nutrition depending on age, organize preventive vaccinations on the calendar.
PLO 15.	Identify tactics and provide emergency medical care in emergencies (according to list 3) for a limited time in accordance with existing clinical protocols and treatment standards.
PLO 16.	Organize the provision of medical care and medical and evacuation measures to the population and servicemen in emergencies and hostilities, including in the field.
PLO 17.	To form rational medical routes of patients; to organize interaction with colleagues in the and other establishments, the organizations and establishments; to apply tools for the promotion of medical services on the market, based on the analysis of the needs of

	the population, in the conditions of functioning of the health care institution, its subdivision, in a competitive environment.
PLO 18.	Perform medical manipulations (according to list 5) in a medical institution, at home or at work on the basis of a previous clinical diagnosis and / or indicators of the patient's condition by making an informed decision, adhering to the relevant ethical and legal norms.
PLO 19.	Determine the state of functioning and limitations of a person's life and duration of incapacity for work with the relevant documents, in a health care facility on the basis of data on the disease and its course, features of professional activity, etc. Maintain medical records of the patient and the population on the basis of regulations.
PLO 20.	Analyze the epidemiological situation and carry out measures of mass and individual, general and local prevention of infectious diseases.
PLO 21.	Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.
PLO 22.	Apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex health problems.
PLO 23.	Assess the impact of the environment on human health to assess the incidence of the population.
PLO 24.	Organize the necessary level of individual safety (own and those cared for) in case of typical dangerous situations in the individual field of activity.
PLO 25.	Clearly and unambiguously communicate their knowledge, conclusions and arguments on health issues and related issues to professionals and non-specialists.
PLO 26.	Communicate fluently in the state and English languages, both orally and in writing, to discuss professional activities, research and projects.
PLO 27.	Plan, organize and conduct activities for the specific prevention of infectious diseases, including in accordance with the National Calendar of preventive vaccinations, both mandatory and recommended. Manage vaccine residues, organize additional vaccination campaigns, including immunoprophylaxis measures.

## **2.Information volume of academic discipline**

4,5 ECTS credits,135 hours to study the discipline.

### **Content module 1. Pathological conditions of the reproductive system at different age periods**

#### **Specific goals:**

1. Identify etiological and pathogenetic factors of the main diseases of the female reproductive system.
2. Make a preliminary diagnosis and make a differential diagnosis of the main gynecological diseases, plan examination and tactics for the patient.
3. To provide emergency assistance in gynecology.
4. Perform the necessary medical manipulations.



**Theme 1. Menstrual function disorders in reproductive age, dysfunctional uterine bleeding, amenorrhea. Physiological and pathological conditions in the perimenopausal period. Neuroendocrine syndromes. COVID-19: diagnostics, tactics, prevention, effects on a woman's reproductive health.**

Menstrual function disorders in reproductive age, neuroendocrine syndromes.

The concept of the perimenopausal period. Physiological changes in the female genitalia during the perimenopausal period. Pathological conditions in the perimenopausal period. COVID-19 diagnostics, tactics, prevention.

**Theme 2. Benign neoplasmy of the genital organs of a woman. Dyshormonal diseases of the mammary gland. Endometriosis.**

**Background and precancerous diseases of the genital organs of a woman. Malignant neoplasms.**

Benign neoplasmy of the genital organs of a woman. Diagnosis, treatment and prevention.

Dyshormonal diseases of the mammary gland. Modern methods of diagnosis, treatment and prevention.

Endometriosis. Modern aspects of etiopathogenesis, diagnosis, treatment, and prevention of endometriosis.

Background and precancerous diseases of the genital organs of a woman. Malignant neoplasms of the female genitals. Modern diagnostic methods, principles of treatment and prevention.

**Theme 3. Female urogenital inflammatory diseases. HIV prevention.**

Modern approaches to the diagnosis and treatment of female urogenital inflammatory diseases. Diagnosis, treatment and prevention of sexually transmitted diseases.

Prevention of HIV infection in medical institutions. Prevention of the risk of infection with infections transmitted with blood and ways to reduce it. Post-contact prevention.

**Theme 4. Emergency conditions in gynecology. Surgery in gynecology. Preparation and postoperative management of gynecological patients during urgent and planned surgery.**

Modern approaches to diagnosis and emergency care in acute abdomen. Modern approaches to diagnosis and emergency care for uterine bleeding. Basic principles and methods of surgical interventions in emergency conditions in gynecology. Traumatic damage to the genitals. Clinic diagnostics and treatment.

Differential diagnosis with acute surgical pathology (appendicitis, intestinal obstruction, cholecystitis, renal colic, perforative gastric ulcer). Prevention of emergency conditions in gynecology.

Indications, contraindications, conditions and types of operations on the cervix; uterus (conservative myomectomy, uterine defunding, supravaginal amputation of the uterus, extirpation of the uterus), appendages of the uterus, when the female genital organs are lowered and protruding. Artificial interruption of pregnancy in the early and late term, indications, methods, complications. Therapeutic and diagnostic endoscopic methods in gynecology.

Features of preparation and postoperative management of gynecological patients during urgent and planned surgery. Postoperative complications and their prevention. Rehabilitation after gynecological interventions.

## **Content module 2. Infertility in marriage. Family planning.**

### **Specific goals:**

1. Identify etiological and pathogenetic factors of the main diseases of the female reproductive system, leading to infertility.
2. Determine the preliminary clinical diagnosis on the basis of interpretation of the data of a special examination of a barren married couple.
3. Consult on contraceptive methods according to life periods and choosing a specific contraceptive method.
4. Determine the necessary examination before using the contraceptive.
5. Learn the use of WHO eligibility criteria.

### **Topic 5. Modern aspects of family planning. Contraceptive methods. Medical criteria for the eligibility of WHO contraceptive methods. Infertility.**

Advising on the choice and use of the contraceptive method: stages of counseling. Methods of contraception according to periods of life.

Modern methods of contraception: classification, mechanism of action, advantages, disadvantages, necessary examination before use, mode of use, side effects, instructions for the patient. Postpartum and post-abortive contraception.

WHO medical eligibility criteria: classification of categories, use of Tables. Methods of contraception in women with HIV.

Medical and social significance of the problem of infertility in marriage.

Etiopathogenetic factors of infertility development. Examination of a married couple in infertile marriage. Modern principles and methods of treatment of female infertility. Indications for the use of assisted reproductive technologies.

## **Content module 3. Physiological obstetrics.**

### ***Specific goals:***

1. Assess the condition of the pregnant woman, woman in childbirth, parturient, fetus and newborn.
2. Plan pregnancy tactics, physiological childbirth and the postpartum period, evaluate the course of the newborn period.

3. Select the method of contraception in the postpartum period.
4. Perform the necessary medical manipulations.
5. Provide obstetric care to pregnant women, and women in labor, parturient.

**Theme 6. Physiological pregnancy, childbirth and postpartum period. Perinatal protection of the fetus. Pharmacotherapy in obstetrics.**

Physiological pregnancy, childbirth and postpartum period. Modern methods of diagnosis of fetal condition. Features of pharmacotherapy at different times of pregnancy and in the postpartum period. Questions of medical ethics and deontology. Methods of contraception in the postpartum period.

**Content module 4. Pathological obstetrics and childbirth. Perinatal pathology.**

**Theme 7. Placental dysfunction, delay in fetal development, fetal distress. Immunological incompatibility of the blood of the mother and fetus. Abnormalities of the fertile egg.**

Placental dysfunction: causes of placenta pathology, classification, diagnostics, prevention, management. Fetal distress, delay in fetal development: etiology and pathogenesis, classification, diagnostics, prevention, management.

Immunological incompatibility of the blood of the mother and fetus (Rhesus conflict, incompatibility under the ABO system, isoerythrocytic, etc.). Pathogenesis, diagnosis, pregnancy management, choosing the optimal childbirth period. Maintenance of childbirth and postpartum period in immunological conflict. Prevention.

Anomalies of the development of the fertile egg. Abnormalities of the extragenital elements of the placenta (placenta, chorionic membranes and umbilical cord). Trophoblastic diseases (molar pregnancy). Polyhydramnios and oligohydramnios: causes, clinic, tactics of pregnancy and childbirth, consequences for the fetus and newborn.

**Theme 8. Miscarriage. Postmature pregnancy. Multiple pregnancy . Maternity traumatism of the mother and fetus. Modern approaches to the diagnosis and treatment of maternity injuries of the mother and fetus.**

Causes of spontaneous abortion at different times. Classification, clinic, diagnosis, treatment and prevention of spontaneous abortion. Threat of premature labor: diagnosis, treatment, obstetric tactics. Prevention of preterm labor. Premature labor.

Postmature pregnancy: diagnosis, treatment, obstetric tactics.

Multiple pregnancy: diagnostics, pregnancy management, complications, delivery.

Maternity traumatism of the mother and fetus, classification. Modern approaches to the diagnosis and treatment of maternity injuries of the mother and

fetus. Features of pregnancy and childbirth in women with a scar on the uterus. Prevention of obstetric injuries.

**Theme 9. Early gestosis. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia. Emergency care.**

Early gestosis: classification, clinic, diagnosis, treatment. Hypertension disorders during pregnancy. Pre-eclampsia: pathogenesis, classification, diagnosis, clinic, treatment, tactics, prevention. Eclampsia: clinic, diagnosis, complications, emergency care, management tactics. Rare forms of gestosis.

**Theme 10. Surgery in obstetrics.**

**Bleeding during pregnancy, in childbirth and in the postpartum period. Hemorrhagic shock. DIC syndrome. Emergencies in obstetrics. Intensive care and resuscitation for bleeding in obstetrics.**

Indications, contraindications, conditions and preparation for surgical interventions in vaginal and abdominal degeneration in obstetrics. The main stages of obstetric operations. Anesthesia of operations. Tools. Aseptics and antiseptics. Maintenance of the postoperative period.

Bleeding during pregnancy, in childbirth and in the postpartum period. Etiology, pathogenesis, clinic, diagnostics. The algorithm of the doctor's actions and methods termination of bleeding.

Hemorrhagic shock. DIC syndrome. Modern approaches to infusion-transfusion and intensive care and resuscitation for bleeding in obstetrics.

**Theme 11. Pregnancy and childbirth in extragenital diseases. Acute surgical pathology and pregnancy. Prevention of vertical transmission of HIV. COVID-19 diagnostics, pregnancy tactics, prevention. Perinatal infections.**

Pregnancy and childbirth in diseases of the cardiovascular system (heart defects, hypertension, arterial hypotension); diseases of the urinary system; liver and gallbladder; diseases of the hematopoietic organs; respiratory organs; digestive system; endocrine system; nervous system; organs of vision; acute and chronic infectious diseases, tuberculosis. The course of pregnancy and childbirth in gynecological diseases. Features of the course and tactics of conducting in acute surgical pathology.

Principles of pregnancy and childbirth in women with HIV. Prevention of vertical transmission of HIV. Principles of pregnancy and childbirth in women with COVID-19. Prevention, tactics.

Perinatal infections in pregnant women: clinical course, diagnosis, management tactics, treatment, prevention.

**APPROXIMATE STRUCTURE OF THE CREDIT**  
**Obstetrics and Gynecology**

Theme	Lecture	Pr. Cl.	SIW
<b>Content module 1. Pathological conditions of the reproductive system at different age periods</b>			
<b>Theme 1.</b> Disorders of menstrual function in reproductive age, dysfunctional uterine bleeding, amenorrhea. Physiological and pathological conditions in the perimenopausal period, neuroendocrine syndromes. COVID-19 diagnostics, management tactics, treatment, effects on a woman's reproductive health.		6	6
<b>Theme 2.</b> Benign neoplasmy of the genital organs of a woman. Dyshormonal diseases of the mammary gland. Endometriosis. Background and precancerous diseases of the genital organs of a woman. Malignant neoplasms.		6	6
<b>Theme 3.</b> Female urogenital inflammatory diseases. HIV prevention.		6	6
<b>Theme 4.</b> Emergency conditions in gynecology. Surgery in gynecology. Preparation and postoperative management of gynecological patients during urgent and planned surgery.		6	6
<b>Content module 2. Infertility in marriage. Family planning.</b>			
<b>Theme 5.</b> Modern aspects of family planning. Contraceptive methods. Medical criteria for the eligibility of the use of WHO contraceptive methods. Infertility		6	6
<b>Content module 3. Physiological obstetrics.</b>			
<b>Topic 6.</b> Physiological pregnancy, childbirth and postpartum period. Perinatal protection of the fetus. Pharmacotherapy in obstetrics.		6	6
<b>Content module 4. Pathology of pregnancy and childbirth. Perinatal pathology</b>			
<b>Theme 7.</b> Placental dysfunction, fetal development delayed, fetal distress. Immunological		6	6

incompatibility of the blood of the mother and fetus. Abnormalities of the fertile egg.			
<b>Theme 8.</b> Miscarriage. Postmature pregnancy. Multiple pregnancy. Birth traumas of mother and fetus. Modern approaches to the diagnosis and treatment of maternity injuries and birth injuries.		6	6
<b>Theme 9.</b> Early gestosis. Hypertension disorders during pregnancy. Pre-eclampsia. Eclampsia. Emergency care.		6	6
<b>Theme 10.</b> Surgical interventions in obstetrics. Bleeding during pregnancy, in childbirth and in the postpartum period. Hemorrhagic shock. DIC syndrome. Emergencies obstetrics. Intensive care and resuscitation for bleeding in obstetrics.		7	6
<b>Theme 11.</b> Pregnancy and childbirth in extragenital diseases. Acute surgical pathology and pregnancy. Prevention of vertical transmission of HIV. COVID-19 diagnostics, tactics for keeping pregnant women, treatment, birth. Perinatal infections.		7	7
<b>Total: ECTS credits – 4,5; hours – 135; of them:</b>		<b>68</b>	<b>67</b>

### THEMATIC PLAN OF PRACTICAL CLASSES Obstetrics and gynecology

№ N/N	theme	Number Hours
1.	Menstrual function disorders in reproductive age, neuroendocrine syndromes. Physiological and pathological conditions in the perimenopause period. COVID-19, effects on reproductive health.	6
2.	Benign neoplasmy of the genital organs of a woman. Dyshormonal diseases of the mammary gland. Endometriosis. Background and precancerous diseases of the genital organs of a woman. Malignant neoplasms.	6
3.	Female urogenital inflammatory diseases. HIV prevention.	6
4.	Emergency conditions in gynecology. Surgery in gynecology. Preparation and postoperative management of gynecological patients during urgent and planned surgery.	6

5.	Infertility.Modern aspects of family planning. Contraceptive methods. Medical criteria for the eligibility of WHO contraceptive methods.	6
6.	Physiological pregnancy, childbirth and postpartum period. Perinatal protection of the fetus. Pharmacotherapy in obstetrics.	6
7.	Placental dysfunction, delayed fetal development, fetal distress. Immunological incompatibility of the blood of the mother and fetus. Abnormalities of the fertile egg.	6
8.	Miscarriage. Postmature pregnancy. Multiple pregnancy. Birth traumas of the mother and fetus. Modern approaches to the diagnosis and treatment of maternity injuries and birth injuries.	6
9.	Early gestosis. Hypertension disorders during pregnancy. Pre-eclampsia. Eclampsia. Emergency care.	6
10.	Surgery in obstetrics .Bleeding during pregnancy, in childbirth and in the postpartum period. Hemorrhagic shock. DIC syndrome. Emergencies in obstetrics.Intensive care and resuscitation for bleeding in obstetrics.	6
11.	Pregnancy and childbirth in extragenital diseases. Acute surgical pathology and pregnancy. Prevention of vertical transmission of HIV. Perinatal infections. COVID-19 diagnostics,tactics for keeping pregnant women,treatment ,birth.	6
	<b>Total</b>	<b>68</b>

**THEMATIC PLAN OF STUDENTS' INDEPENDENT WORK**  
**Obstetrics and gynecology**

<b>№ N/N</b>	<b>Types of SIW</b>	<b>Number of hours</b>	<b>Types of control</b>
1.	Anatomy of female genital organs. Methods of examination of the gynecological patients.	6	Current control in practical classes
2.	Examination of the mammary glands. Methods of treatment of benign tumors . Risk factors for malignant neoplasms.	6	Current control in practical classes
3.	Vaginal microecosystem at different periods of life.Specific and nonspecific inflammatory diseases of the female genital organs: diagnostic algorithms.	6	Current control in practical classes
4.	Differential diagnosis of "acute abdomen".	6	Current control in practical classes
5.	Contraception in adolescents, at reproductive	6	Current control in practical classes

	age, postabortion and emergency.		
6.	Female pelvis, planes, size. External examination of the pregnant patient. Pharmacotherapy during pregnancy and lactation. Teratogenic effect of the drug. Partogram.	6	Current control in practical classes
7.	Assessment of CTG and BPP. Labor abnormalities. Varieties of narrow pelvis, biomechanism of childbirth with different variants of presentations and insertings.	6	Current control in practical classes
8.	Clinical stage of spontaneous abortion, tocolytic drugs, indications.	6	Current control in practical classes
9.	Treatment of early gestosis. Diagnostic criteria and algorithm of actions in severe pre-eclampsia. Emergency care for eclampsia.	6	Current control in practical classes
10.	Determination of permissible "physiological" blood loss in childbirth. Methods of estimation of blood loss. Uterotonics (prescriptions). Caesarean section, technique of execution. Conditions, indications, categories of urgency. Laparoscopic intervention during pregnancy. General principles of providing surgical care to pregnant women.	6	Current control in practical classes
11.	Degree of obstetric risk in extragenital pathology. Appendicitis and pregnancy. Acute pancreatitis and pregnancy. Septic postpartum diseases. Indications for surgical treatment.	7	Current control in practical classes
	<b>Total hours</b>	<b>67</b>	

**3. Individual tasks**- writing the history of childbirth and the history of gynecological patients is not planned by the curriculum for the 6th year.

**4. Teaching methods** In the study of the discipline "Obstetrics and Gynecology" traditional teaching methods are used: verbal, visual, practical; as well as methods of educational and cognitive activity: explanatory and illustrative, reproductive, problem presentation method, part-search, research method. Methods of control, as methods of training, are control of the teacher, self-control, mutual control. Additional materials, models, demonstration of stars, tools for working out practical skills, situational problems. Each lesson involves watching educational films. Independent work of students involves preparing for practical classes and studying certain topics that are part of practical classes or submitted for independent study. For this purpose, textbooks, guidelines, etc. have been developed. All necessary materials (theses and presentations of lectures, methodological development, normative documents) are presented on the information platform of Danylo Halytskyi MISA LNMU.



## **5. Control methods.**

**Types of control** - current and final.

**Form of final control in accordance with the curriculum:** scoring.

**Current control** is carried out at each practical lesson in accordance with specific goals on each topic.

Evaluation of current academic **activity:** During the assessment of the assimilation of each topic for the current activity of the student are assessed on a 4-point (traditional) scale, taking into account the approved evaluation criteria for the relevant discipline.

### **Criteria for assessing the current educational activities of the student**

Students' knowledge is evaluated both in theoretical and practical training according to the following criteria:

**Excellent ("5")** – The student correctly answered 90-100% of A-format tests.

Correctly, clearly logically and fully answers all standardized questions of the current topic, including the issues of lecture course and independent work.

**Good ("4")** - The student correctly answered 70-89% of tests format A. Correctly, and essentially answers standardized questions of the current topic, lecture course and independent work.

**Satisfactory ("3")** – The student correctly answered 50-69% of tests format A. Incompletely, with the help of additional questions, answers standardized questions of current activity, lecture course and independent work.

**Unsatisfactory ("2")** - The student correctly answered less than 50% of the tests format A. Does not know the material of the current topic, can not build a logical answer, does not answer additional questions, does not understand the content of the material.

## **6. The form of the final control of the success of training - credit.**

Semester control is carried out in the forms of the test (4,6) course and exam for the 5th year in the amount of material determined by the working program of the discipline and within the time limits established by the working curriculum.

## **7. Scheme of points accrual and distribution of points that students receive:**

For disciplines, the form of final control of which is the scoring:

**The maximum number** of points a student can score for current academic activity during the semester is 200 points.

**The minimum number of points** a student must score for current academic activity during the semester is 120 points.

**The calculation of** the number of points is carried out on the basis of the grades received by the student on the traditional scale during the study of the discipline.

$$X=CA*200/5$$

**Recalculation of the average score for current activities into a multi-point scale (final control-scoring)**

4- Score scale	200- Score scale	4- Score scale	200- Score scale	4- Score scale	200- Score scale	4- Score scale	200- Score scale
5	200	4,47	179	3,94	158	3,42	137
4,97	199	4,45	178	3,92	157	3,4	136
4,95	198	4,42	177	3,89	156	3,37	135
4,92	197	4,4	176	3,87	155	3,35	134
4,9	196	4,37	175	3,84	154	3,32	133
4,87	195	4,35	174	3,82	153	3,3	132
4,85	194	4,32	173	3,79	152	3,27	131
4,82	193	4,3	172	3,77	151	3,25	130
4,8	192	4,27	171	3,74	150	3,22	129
4,77	191	4,24	170	3,72	149	3,2	128
4,75	190	4,22	169	3,7	148	3,17	127
4,72	189	4,19	168	3,67	147	3,15	126
4,7	188	4,17	167	3,65	146	3,12	125
4,67	187	4,14	166	3,62	145	3,1	124
4,65	186	4,12	165	3,6	144	3,07	123
4,62	185	4,09	164	3,57	143	3,05	122
4,6	184	4,07	163	3,55	142	3,02	121
4,57	183	4,04	162	3,52	141	3	120
4,55	182	4,02	161	3,5	140	Min. 3	Not enough
4,52	181	3,99	160	3,47	139		
4,5	180	3,97	159	3,45	138		

## Methodical support

Methodical materials.

Electronic bank of test tasks, situational tasks.

A set of tables for all sections of obstetrics and gynecology.

## 8.Recommended references

### Basic

1. Акушерство та гінекологія: У 4 т.: національний підручник / Кол. авторів; за ред. акад. НАМН України, проф. В.М. Запорожана. Т.1: Акушерство / В.М. Запорожан, В.К. Чайка, Л.Б. Маркін та ін.; за ред. акад. НАМН України, проф. В.М. Запорожана. К.:ВСВ " Медицина ", 2013. 1032с.
2. Акушерство і гінекологія: у 2 книгах. Книга 1. Акушерство: підручник / В.І. Грищенко, М.О. Щербина, Б.М. Венцківський та ін. — 4-е видання. К.: Медицина, 2020. 424 с.
3. Клінічне акушерство та гінекологія: 4-е видання / Браян А. Магован, Філіп Оуен, Ендрю Томпсон. – 2021. – ВСВ «Медицина». – 512 с.
4. Markin L.B., Shatylovych K.L. Intercurrent diseases during pregnancy and delivery: textbook. Lviv: LA Piramid, 2023, 388 p.
5. Маркін Л.Б., Шахова О.В. та співавт. Мала студентська енциклопедія з акушерства та гінекології. – 2014. – Львів, Посвіт

### Additional

1. Невідкладні стани в акушерстві: навчальний посібник (Венцківський Б.М., Камінський В.В., Грищенко В.І. та ін.)- К.:Золотые ворота, 2010.-246 с.
2. Emergencies in obstetrics and gynecology / L.Markin, O.Medvyedyeva, O.Matviyenko. – Lviv: ЗУКЦ, 2018. – 160 p.
3. Доброякісні пухлини матки та яєчників у вагітних. Маркін Л.Б., Бойчук А.В., Шатилович К.Л., – Львів, 2016. – 84 с.
4. Pragmatic obstetrics and gynecology: підручник англійською мовою Markin L.B., Zimenkovsky A.V., Podolskyi Vol.V. and other, LNMU name after Danylo Halytsky, 2021.-236 p.
5. Маркін Л.Б., Маляр В.В. Ідіопатичне маловоддя та багатоводдя: Монографія / Л.Б.Маркін, В.В.Маляр. – Ужгород: Поліграфцентр «Ліра», 2019. – 218 с.
6. Modern aspects of obstetrics and gynecology / L.Markin, O.Matviyenko, S.Markin, V.Flud. – Lviv: Літературна агенція «ПІРАМІДА», 2022. – 212 p.
7. Діючі «Клінічні протоколи» затверджені наказом МОЗ України з акушерства і гінекології
8. Williams Odstetrics by F.Gary Cunningham.25<sup>th</sup> edition: 2018-McGraw-Hill Education.-1344p.
9. Williams Gynecology,Fourth Edition.Barbara L.Hoffman;John O.Schorge;Karen D.Bradshaw and other,-2020.- McGraw-Hill Education.-450p.