

## SYLLABUS

### 1. General information on the course

<b>Full course name</b>	Obstetrics and Gynecology
<b>Full official name of a higher education institution</b>	Sumy State University
<b>Full name of a structural unit</b>	Medical Institute. Department of Obstetrics, Gynecology and Family Planning
<b>Author(s)</b>	Boiko Alesia Valeriivna
<b>Cycle/higher education level</b>	The Second Level Of Higher Education, National Qualifications Framework Of Ukraine – The 7th Level, QF-LLL – The 7th Level, FQ-EHEA – The Second Cycle
<b>Semester</b>	2 weeks across 7 semester
<b>Workload</b>	The volume is 3 ECTS credits, 90 hours, of which 66 are contact work with the teacher (56 practical classes and 10 hours of lectures), 24 hours is independent work
<b>Language(s)</b>	English

### 2. Place in the study programme

<b>Relation to curriculum</b>	Compulsory course available for study programme "Medicine" International education
<b>Prerequisites</b>	Krok-1, Required knowledge of: Latin and medical terminology, - medical biology, - medical computer science, - human anatomy, - physiology, - histology, cytology and embryology - biological and bioorganic chemistry - microbiology, virology and immunology, - pathomorphology, - pathophysiology, - pharmacology - hygiene and ecology - propaedeutics pediatrics - nursing practice - radiology.
<b>Additional requirements</b>	There are no additional conditions
<b>Restrictions</b>	There are no restrictions

### 3. Aims of the course

The purpose of teaching the discipline "Obstetrics and Gynecology" is: the acquisition of knowledge from physiological and pathological obstetrics, conservative and operative gynecology, assimilation general principles of pregnancy, childbirth and the postpartum period, the ability to analyze obstetric situation and surgical risks of the gynecological patient, use the basic and

additional research methods, demonstrate skills and abilities according to educational and professional programs.

## 4. Contents

### **Module 1. Physiological and pathological course of pregnancy, childbirth and postpartum period.**

Topic 1 Organization of obstetric and gynecological services in Ukraine. Female pelvis. Fetus as an object childbirth.

Topic 1. Organization of obstetric and gynecological services in Ukraine. Female pelvis. Fetus as an object childbirth. Obstetrics as a branch of clinical medicine that considers physiological and pathological processes, related to pregnancy, childbirth and the postpartum period, its place in the general system medicine. Tasks of the course of obstetrics. The main historical stages of development of obstetrics and structure obstetric service in Ukraine. Principles of organization and methods of treatment and prevention assistance to pregnant women and women in labor in Ukraine. The structure of childbirth medical and preventive institutions, features of the organization of their work. Pelvis with anatomical and obstetric points of view. The structure and size of the female pelvis. Planes and dimensions of the pelvis. Measuring the size of the pelvis. Additional pelvic dimensions. Pelvic bottom. The structure and dimensions of the head and trunk of the fetus. Signs of maturity of the fetus. Mastering practical skills in simulation center on the phantom: measuring the size of the pelvis with a pelvometer, measurement of the Solovyov index, measurement of the Michaelis rhombus.

Topic 2 Physiology of pregnancy. Methods of examination of pregnant women. Perinatal protection of the fetus.

Fertilization and development of a fertilized egg. Placenta, its structure and function. Critical periods of development embryo and fetus. Adaptive processes in a woman's body during pregnancy. Dispensary observation and care of pregnant women. Features of management of pregnant women in the conditions of a woman consultations. Methods of examination of pregnant women: diagnosis of early and late pregnancy. Topography of the fetus in the uterus. Management of physiological pregnancy. Gravidogram. Laboratory diagnosis of HIV infection. Counseling in the context of HIV infection. The concept of counseling and its ethical principles. Counseling skills. Determination of prenatal leave and date of birth. Nutrition and hygiene of pregnant women. Breast care. Perinatal protection of the fetus. Influence of harmful factors on the embryo and fetus. Principles of pharmacotherapy at an early stage pregnancy.

Topic 3 Physiology of childbirth. Anesthesia of childbirth.

Basic principles of normal childbirth. Psychoprophylactic preparation for childbirth. Initiation of labor. Causes of childbirth. Determining the readiness of the organism mother before childbirth. Predictors of childbirth, preliminary period. Diagnosis of periods and phases of childbirth. The mechanism of contraction of the myometrium during contractions (contractions, retractions, distractions). Course the first, second and third periods of childbirth. Childbirth. Supportive care during childbirth and childbirth. The order of recording partograms. Monitoring of the fetus in childbirth. Methods registration of uterine contractions and fetal heartbeat. Biomechanism of childbirth in anterior and posterior type of occipital presentation. Active management of the third period of childbirth.

Topic 4 Physiology of the postpartum period. Physiology of the neonatal period. Reanimation newborns.

Physiology of the postpartum period. Physiology of the neonatal period. Signs of separation and removal of the placenta. External methods of separation of the placenta. Examination of the placenta after childbirth. Primary toilet of the newborn. Anesthesia of childbirth. Non-drug and medical anesthesia for childbirth. Requirements for medical anesthesia. Clinic and conducting the postpartum period. The concept of breastfeeding. Postpartum contraception: the method of lactation amenorrhea (MLA). Anatomical and physiological features of the period newborns. Newborn care. Advantages of cohabitation of mother and child. Features of resuscitation in newborns. Indications for providing resuscitation care to newborns. Algorithm of resuscitation care newborns.

Topic 5 Anomalies in the development of the fertilized egg. Multiple pregnancy.

Anomalies of extraembryonic elements of the ovum / placenta, amniotic membranes and umbilical cord rope. Bubble drift. Polyhydramnios and hypohydramnios: causes, diagnosis, management tactics pregnancy, consequences for the fetus and newborn. Hereditary and congenital diseases of the fetus. Diagnosis. Indications for medical and genetic counseling. Multiple pregnancy: classification, diagnosis, features of the course and management of multiple pregnancy. Childbirth at multiple pregnancy.

Topic 6 Placental dysfunction. Fetal distress. Delayed fetal development. Isoantigenic incompatibility of blood of mother and fetus.

Placental dysfunction, fetal distress, fetal developmental delay: risk factors, classification, diagnosis, tactics of pregnancy, prevention. Methods of diagnosing the condition of the fetus: non-invasive - ultrasound, CTG, fetal biophysical profile, Doppler, MRI; invasive - amniocentesis, cordocentesis, chorion biopsy. Biochemical research methods at different stages of pregnancy. Isoantigenic incompatibility of maternal and fetal blood (rhesus conflict, incompatibility according to the ABO system, isoleukocyte, etc.). Pathogenesis, diagnosis, management tactics, treatment, and prevention. Hemolytic disease of the fetus and newborn. Indications for premature birth at rhesus conflict.

Topic 7 Early gestosis. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia.

Early gestosis: classification, clinic, diagnosis, treatment. Hypertensive disorders during pregnancy. Preeclampsia: pathogenesis, classification, diagnosis, clinic, treatment, tactics, prevention. Eclampsia: clinic, diagnosis, complications, emergency care, tactics maintenance. Rare forms of preeclampsia.

Topic 8 Miscarriage. Premature birth. Post-term pregnancy. Problem macrosomia in obstetrics.

Causes of spontaneous abortion at different times. Classification, clinic, diagnosis, treatment and prevention of spontaneous abortion. Threat of premature birth: diagnosis, treatment, obstetric tactics. Prevention of miscarriage. Premature childbirth. Etiology and pathogenesis of delayed pregnancy. Signs confirming the transfer pregnancy. Features of pregnancy and childbirth. Indications and conditions and methods of induction labor.

Topic 9 Narrow pelvis. Anomalies of position and presentation of the fetus. Childbirth with the wrong position and pelvic presentation of the fetus.

Anomalies of the pelvis. Classification, diagnosis. Diagnosis of synclitic and asynclitic inserting the head. Clinically narrow pelvis. Features of childbirth. Wrong position fetus: classification, diagnosis, tactics of pregnancy. Extension of the head fetus: classification, diagnosis. Correction of incorrect positions during pregnancy. Childbirth at incorrect position and pelvic presentation of the fetus, management tactics. Classification pelvic presentation of the fetus. Diagnosis and features of pregnancy. Pelvic correction presentation during pregnancy. Features of childbirth with pelvic presentation of the fetus. Biomechanism of childbirth in pelvic presentation of the fetus. Manual assistance with pure buttocks presentation by the method of Tsovyanov I. Classical manual assistance in removing the shoulder girdle. Derivation of the head by the method of Maurice-Levre-Lachapel. Manual foot care presentation by the method of Tsovyanov II.

Topic 10 Anomalies of contractile activity of the uterus.

Classification, risk factors, pathogenesis of various types of birth defects. Modern methods of diagnosis and treatment of labor disorders. Prevention of violations labor. Perinatal effects.

Topic 11 Obstetric bleeding during the first and second half of pregnancy, childbirth and postpartum period. Intensive care and resuscitation for bleeding in obstetrics.

Bleeding in the first half of pregnancy (miscarriage, ectopic pregnancy, premature detachment and placenta previa). Etiology, pathogenesis, clinic, diagnosis. Presentation of the placenta: etiology, pathogenesis, classification, clinic, diagnosis, features of the course, management of pregnancy and childbirth. Premature exfoliation is normal located placenta: etiology, clinic, diagnosis, features of pregnancy and childbirth. Kuveler's uterus. Disruption of placental abruption. Uterine bleeding in the third stage of labor and the early postpartum period. Hypotonic bleeding. Coagulopathic bleeding (embolism amniotic fluid and other causes). Hemorrhagic shock, terminal conditions in obstetrics. Disseminated intravascular coagulation syndrome. Intensive care and resuscitation with bleeding in obstetrics. Hemorrhagic shock. DIC syndrome. Modern approaches to infusion-transfusion and intensive care and resuscitation for bleeding in obstetrics.

Topic 12 Operative obstetrics. Childbirth injuries.

General concepts of surgical intervention in obstetrics: abortion in early pregnancy and late dates. Operations for the preparation of the birth canal (perino - and episiotomy, amniotomy). Obstetric forceps, vacuum fetal extraction, cesarean section: indications. Surgical interventions in consecutive and postpartum period. Manual separation of the placenta, excretion of manure: technique of carrying out. Manual and instrumental examination of the uterus after childbirth. Indications to supravaginal amputation, uterine extirpation, ligation of internal iliac arteries. Traumatic damage to the vulva, vagina, perineum. Rupture of the cervix. Uterine rupture: classification, mechanism of occurrence. The clinical picture of uterine rupture: threatening, that has begun and already took place. Features of uterine rupture behind the scar. Diagnosis, treatment and prevention. Inside uterus. Differences and ruptures of the pelvic joints. Postpartum fistulas. Etiology, treatment, prevention.

Topic 13 Pregnancy and childbirth in extragenital diseases.

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

Topic 14 Postpartum septic diseases. Perinatal infections. Prevention of vertical HIV transmission.

Postpartum septic diseases: postpartum septic wound, postpartum metroendometritis, metrophlebitis, mastitis, postpartum peritonitis, peritonitis after cesarean section. Obstetric sepsis: classification etiology, pathogenesis, diagnosis, modern principles treatment, prevention. Septic shock, emergency care. Methods of suppression of lactation. Perinatal infections in pregnant women: clinical course, diagnosis, management tactics, treatment, prevention. Principles of pregnancy and childbirth in women with HIV. Prevention of vertical HIV transmission.

Topic 15 Protection of educational history of childbirth. Final lesson from the module "Physiological and pathological course of pregnancy, childbirth and the postpartum period".

Protection of educational history of childbirth. Protection of medical history will include issues of collection features history, methods of examination, analysis of labor and assessment of the newborn (ie, according to the conducted curation). The final lesson will include questions for the whole course physiological and pathological obstetrics, including: theoretical questions, questions to computer test control, as well as practice of practical skills in simulation center (in the absence of quarantine at the patient's bedside).

## 5. Intended learning outcomes of the course

After successful study of the course, the student will be able to:

LO1	Ability to collect medical information about the patient and analyze clinical data.
LO2	Ability to determine the required set of laboratory and instrumental studies and to evaluate their results.
LO3	Ability to establish a provisional and clinical diagnosis of disease.
LO4	Ability to determine the necessary mode of work, rest, and diet in the treatment course.
LO5	Ability to determine the principles of treatment and treatment modality and to perform medical procedures.
LO6	Ability to diagnose medical emergencies, determine the approach to emergency medical care, implement medical evacuation procedures.
LO7	Ability to solve medical problems in new or unfamiliar environments given incomplete or limited information, taking into account aspects of social and ethical responsibility.
LO8	Ability to determine the approach to physiological pregnancy, physiological delivery, and postpartum period. Skills in counseling with regard to family planning and contraceptive method selection.

LO9	Ability to perform sanitary and preventive measures.
LO10	Ability to plan and conduct preventive and disease control measures for infectious diseases.
LO11	Ability to perform disability examination.
LO12	Ability to maintain medical records, including electronic documents.
LO13	Ability to conduct epidemiological and medical-statistical research of public health; ability to process governmental, social, economic, and medical information.
LO14	Ability to assess the influence of environment, socio- economic and biological determinants on the health of a person, family, or population.
LO15	Ability to analyze activity of a doctor, department, or healthcare institution; to carry out measures for providing healthcare quality and to increase the efficiency of medical resources.
LO16	Ability for organization and integration of public medical care and marketing of medical service.
LO17	Ability to integrate knowledge and solve complex health problems in a broad or multidisciplinary context.
LO18	Ability to manage healthcare workflows that are complex, unpredictable and require new strategic approaches
LO19	Ability to develop and implement scientific and applied healthcare projects.

## 6. Role of the course in the achievement of programme learning outcomes

Programme learning outcomes achieved by the course.

For 222 Medicine:

PO1	To detect and identify the leading clinical symptoms and syndromes (according to the List 1); to establish the most probable nosological or syndromic preliminary clinical diagnosis of diseases (according to the List 2) using standard methods, preliminary data of the patient`s anamnesis, patient`s examination data, and knowledge about a human, his organs and systems.
PO2	To collect information about the patient`s general condition; to assess the patient`s psychomotor and physical development and the state of organs and systems of the body; to assess information on the diagnosis (according to the List 4) based on laboratory and instrumental findings.
PO3	To order and analyze additional (mandatory and optional) examinations (laboratory, radiological, functional and/or instrumental) (according to the List 4) in order to perform a differential diagnosis of diseases (according to the List 2).
PO4	To establish a final clinical diagnosis at a medical institution under control of a supervising doctor by means of informed decision and logical analysis of the obtained subjective and objective data of clinical and additional examinations, and differential diagnosis, following the relevant ethical and legal norms (according to the List 2).

PO5	To detect the key clinical syndrome or the reason for patient`s condition severity (according to the List 3) via informed decision and evaluation of the person`s state under any circumstances (at home, in the street, at a healthcare facility), including under emergency and military operation conditions, in the field, with a lack of information and limited time.
PO6	To determine the nature and treatment principles (conservative, operative) in patients with diseases (according to the List 2) at a healthcare facility, at patient`s home or during medical evacuation process (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures based on the principles of evidence-based medicine; if needed to go beyond the standard scheme, to substantiate the personalized recommendations under control of a supervising doctor at a medical facility.
PO7	To determine an appropriate work and rest mode in the treatment of diseases (according to the List 2) at a healthcare institution, at patient`s home and during medical evacuation (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures.
PO8	To determine an appropriate diet in the treatment of diseases (according to the List 2) at a healthcare institution, at patient`s home and during medical evacuation (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures.
PO9	Determine the approach, plan and tactics of physiological pregnancy, physiological childbirth and the postpartum period by making an informed decision for existing algorithms and standard schemes.
PO10	Assess the general condition of the newborn by acceptance reasonable decision according to existing algorithms and standard schemes, adhering to the relevant ethical and legal norms.
PO11	Determine the tactics of emergency medical care, under any circumstances, adhering to the relevant ethical and legal norms, by adopting reasonable decision, based on the main clinical syndrome (severity of the condition) diagnosis of an emergency (according to the list 3) in a limited time with standard schemes.
PO12	To provide emergency medical assistance under any circumstances, adhering to the relevant ethical and legal norms, by making an informed decision based on the main clinical syndrome (disease severity) and emergency diagnosis (according to the List 3) using standard schemes and predetermined approach under limited time conditions based on the principles of evidence-based medicine.
PO13	To organize medical evacuation procedures among the population and the military under emergency and military operation conditions (including in the field), and during the phases of medical evacuation, given the existing system of medical evacuation provision.
PO14	To perform medical procedures (according to the List 5) at a medical facility, at home or at work on the basis of a provisional clinical diagnosis and/or health parameters through making an informed decision and adhering to the relevant ethical and legal norms.



PO15	To perform procedures related to emergency medical assistance within a limited time and under any circumstances, using standard schemes on the basis of a medical emergency diagnosis (according to the List 3).
PO16	To plan and implement a system of sanitary and preventive measures against the occurrence and spread of diseases among the population.
PO17	To analyze epidemiological situation and carry out measures of mass and individual, general and local prevention of infectious diseases.
PO18	To search for the necessary information in the professional literature and databases; to analyze, evaluate, and apply this information. To apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex health problems.
PO19	To assess environmental impact on public health.
PO20	To formulate goals and define the structure of personal activity based on the analysis of social and personal needs.
PO21	To organize an appropriate level of individual safety (own and of those cared for) in case of typical dangerous situations in the individual field of activity.
PO22	To communicate one`s knowledge, conclusions, and arguments on health issues and related concerns clearly and unambiguously to professionals and non-specialists, in particular to students.
PO23	To manage healthcare workflows that are complex, unpredictable and require new strategic approaches; to organize conditions for work and professional development of staff.
PO24	To communicate freely in state and foreign languages orally and in writing in order to discuss professional and research activities.
PO25	To make effective healthcare decisions assessing resources and considering social, economic, and ethical implications.

## 7. Teaching and learning activities

### 7.1 Types of training

<p><b>Topic 1. Organization of obstetric and gynecological services in Ukraine. Female pelvis. Fetus as an object childbirth.</b></p> <p>pr.tr.1 "Organization of obstetric and gynecological services in Ukraine. Female pelvis. The fetus is like object of childbirth." (full-time course)</p> <p>"Organization of obstetric and gynecological services in Ukraine. The role of the family doctor in providing obstetric and gynecological care. "(full-time) The subject of obstetrics and gynecology, its significance. The main stages of development. Organization obstetric and gynecological service in Ukraine. The structure of obstetric and gynecological hospitals. The role of the family doctor in providing obstetric and gynecological care. Study of this topic involves theoretical work in the classroom, acquaintance with the structure of the clinical institution, the organization of its work, the study of regulations governing the work obstetric and gynecological medical institution, both inpatient and outpatient type, and as well as regulations governing the work of obstetricians and gynecologists.</p>
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pr.tr.2 "Female pelvis. Fetus as an object of childbirth." (full-time course)

Pelvis from anatomical and obstetric points of view. The structure and size of the female pelvis. Planes and dimensions of the pelvis. Measuring the size of the pelvis. Additional pelvic dimensions. Pelvic floor. The structure and size of the head and torso of the fetus. The concept of newborn maturity. Signs of maturity and maturity fetus. The study of this topic involves theoretical work in the classroom, work in a simulation center using an obstetric phantom and medical equipment (tasometer, tape measure). Mastering practical skills in a simulation center on a phantom: measuring the size of the pelvis with a tasometer, measuring the Solovyov index, measuring the rhombus Michaelis. Carrying out pelviometry on a phantom and (in the absence of quarantine restrictions) on a virtual patient or a pregnant woman in a women's clinic.

**Topic 2. Physiology of pregnancy. Methods of examination of pregnant women. Perinatal protection of the fetus.**

pr.tr.3 "Physiology of pregnancy." (full-time course)

Adaptive processes in a woman's body during pregnancy. Dispensary observation and care of pregnant women. Diagnosis of early and late pregnancy. Management of physiological pregnancy. Features of management of pregnant women in the conditions of women's consultation. The study of this topic involves theoretical work in the classroom, in the absence of quarantine skills: to collect and assess the history of general and specific functions of the female body; to establish the term of pregnancy, the expected term of childbirth and the weight of the fetus, and in the absence quarantine restrictions provide for work in a women's clinic or obstetric hospital (at the patient's bedside). Mastering the skills of collecting anamnesis, determining the term of prenatal leave, the expected date of birth with the help of role-playing games. Work with the use of virtual simulation (watching movies) with further discussion.

pr.tr.4 "Methods of examination of pregnant women. Perinatal protection of the fetus." (full-time course)

Methods of examination of pregnant women. Topography of the fetus in the uterus. Issues of perinatal protection of the fetus. Influence of harmful environmental factors on the fetus. Questions of perinatal pharmacology. The study of this topic involves theoretical work in the classroom, in the absence quarantine skills acquisition: conduct an external obstetric examination of the pregnant woman (receptions Leopold, auscultation of fetal heartbeat, pelviometry); set the term of pregnancy, estimated date of birth and fetal weight; to conduct an internal obstetric examination, measurement of diagonal conjugate (on a phantom), and in the absence of quarantine restrictions provided work in a women's clinic or obstetric hospital (near the bed atient). Work with the use of virtual simulation (watching movies) with the subsequent discussion. Mastering the skills of collecting anamnesis, determining the term of prenatal leave, estimated date of birth using role-playing games. Methods of examination of the pregnant woman in the conditions simulation center (mastering practical skills on models) using obstetric phantom. Keeping a gravidogram.

**Topic 3. Physiology of childbirth. Anesthesia of childbirth.**

pr.tr.5 "Physiology of childbirth." (full-time course)

Psychoprophylactic preparation for childbirth. Initiation of labor. Causes childbirth. Basic principles of normal childbirth. The study of this topic involves theoretical work in the classroom, work in the delivery room (student presence at childbirth). Childbirth. Maternity care. Supportive care during childbirth and childbirth. Maintenance of partogram (work with medical documentation). Acquaintance with the order of recording partograms. Be able to evaluate the results of the study of the fetus (CTG, ultrasound, BPP, dopplerometry of blood flow) and determine the tactics of pregnancy depending on the received results Work in the simulation center (mastering practical skills on models). Working out of the biomechanism of childbirth at anterior and posterior occipital view presentation. Determining the position of the head relative to the planes of the pelvis. Conducting an episiotomy, perineotomy, local anesthesia for suturing an episiotomy incision, active management of the third period of childbirth, identification of signs and practice of external methods of separation and removal manure, examination of the birth canal. Work with the use of virtual simulation (review films) with further discussion. Determining the period of childbirth (working with a virtual patient, mastering skills using role-playing games).

pr.tr.6 "Childbirth anesthesia." (full-time course)

Methods of labor anesthesia. Non-drug and drug analgesia of childbirth. Requirements for medical anesthesia. Master the methods of psychoprophylactic preparation for childbirth. The study of this topic involves theoretical work in the classroom, and provided absence of quarantine restrictions work in the conditions of a maternity hospital, obstetrics is provided operating room (acquaintance with methods of spinal, epidural anesthesia, endotracheal anesthesia for analgesia obstetric surgery). Work with the use of virtual simulation (watching movies) with further discussion.

**Topic 4. Physiology of the postpartum period. Physiology of the neonatal period. Reanimation newborns.**

pr.tr.7 "Physiology of the postpartum period." (full-time course)

Changes in the body of the mother, genitals, mammary glands. Clinic and management postpartum period. The concept of breastfeeding. Postpartum contraception: a method lactational amenorrhea (MLA). The study of this topic involves theoretical work in the school room, in the simulation center (mastering practical skills on models), working off newborn care skills. Work with the use of virtual simulation (review films) with further discussion.

pr.tr.8 "Physiology of the newborn period. Resuscitation of newborns." (full-time course)

Anatomical and physiological features of the neonatal period. Assess the condition of the newborn for Apgar scale, to conduct the primary toilet of the newborn. Primary toilet. Features of resuscitation care for newborns in the delivery room. Indications for resuscitation of newborns. Learning ten steps thermal circuit. Features of newborn care. Advantages of cohabitation mother and child. The study of this topic involves theoretical work in the classroom, in simulation center (mastering practical skills on models), practice skills newborn care. Work in an obstetric hospital, intensive care unit newborns (according to the signed agreement between the university and the clinical institution), work in simulation center (mastering the algorithm of resuscitation of newborns (obstetric phantom, medical equipment - pinlon, laryngoscope, intubation tubes, etc.). Application of virtual simulation (watching movies with further discussion).

**Topic 5. Anomalies in the development of the fertilized egg. Multiple pregnancy.**

pr.tr.9 "Anomalies in the development of the fertilized egg." (full-time course)

Anomalies of extraembryonic elements of the ovum / placenta, amniotic membranes and umbilical cord rope. Polyhydramnios and hypohydramnios: causes, diagnosis, tactics of pregnancy, consequences for fetus and newborn. Hereditary and congenital diseases of the fetus. Diagnosis. Indications to medical and genetic counseling. The study of this topic involves theoretical work in training room, in the simulation center (mastering practical skills on models), for no quarantine restrictions work in the office of a medical geneticist, work in the office ultrasound diagnostics, work with the use of virtual simulation (watching movies) with further discussion.

pr.tr.10 "Multiple pregnancy." (full-time course)

Multiple pregnancy: classification, diagnosis, features of the course and management of multiple pregnancy. Childbirth in multiple pregnancies. The study of this topic involves theoretical work in the study room, in the simulation center (mastering practical skills on models), in the absence of quarantine restrictions work in the office of a medical geneticist, work in ultrasound diagnostics room, work with the use of virtual simulation (viewing films) with further discussion.

**Topic 6. Placental dysfunction. Fetal distress. Delayed fetal development. Isoantigenic incompatibility of blood of mother and fetus.**

pr.tr.11 "Placental dysfunction. Fetal distress. Fetal developmental delay." (full-time course)

Placental dysfunction, fetal distress, fetal developmental delay: risk factors, classification, diagnosis, tactics of pregnancy, prevention. Methods of diagnosing the condition of the fetus: non-invasive - ultrasound, CTG, fetal biophysical profile, Doppler, MRI; invasive - amniocentesis, cordocentesis, chorion biopsy. The study of this topic involves theoretical work in the school room, in the simulation center (mastering practical skills on models), work with using a virtual simulation (watching movies) with further discussion. Provided absence of quarantine restrictions work with medical equipment in the clinic: assessment the results of the study of the fetus and placenta (CTG, ultrasound, BPP, dopplerometry of umbilical vessels) and determining the tactics of pregnancy depending on the results.

pr.tr.12 "Isoantigenic incompatibility of maternal and fetal blood." (full-time course)

Isoantigenic incompatibility of maternal and fetal blood (rhesus conflict, incompatibility according to the ABO system, isoleukocyte, etc.). Hemolytic disease of the fetus and newborn. Indications to premature birth in rhesus conflict. The study of this topic involves theoretical work in the study room, in the simulation center (mastering practical skills on models), work with the use of virtual simulation (watching movies) with the subsequent discussion.

**Topic 7. Early gestosis. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia.**

lect.1 "Early gestosis. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia." (full-time course)

Early gestosis: classification, clinic, diagnosis, treatment. Hypertensive disorders during pregnancy. Preeclampsia: pathogenesis, classification, diagnosis, clinic, treatment, tactics, prevention. Eclampsia: clinic, diagnosis, complications, emergency care, tactics maintenance. Rare forms of preeclampsia.

pr.tr.13 "Early gestosis." (full-time course)

Early gestosis: classification, clinic, diagnosis, treatment. The study of this topic involves theoretical work in the classroom, in the simulation center (practice of skills on phantoms, the use of virtual simulation (watching movies with further discussion). In addition, the study of this topic involves role-playing games, mastering the skills of detection early signs of preeclampsia, the use of simple screening methods for the diagnosis of preeclampsia, evaluation of laboratory results.

pr.tr.14 "Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia" (full-time course)

Hypertensive disorders during pregnancy. Preeclampsia: pathogenesis, classification, diagnosis, clinic, treatment, tactics, prevention. Eclampsia: clinic, diagnosis, complications, emergency care, management tactics. The study of this topic involves theoretical work in training room, in the simulation center (practice of skills on phantoms, application virtual simulation (watching movies with further discussion). In addition, when studying this topic provides role-playing games, evaluation of laboratory results examination. Work in the department of extragenital pathology and obstetric resuscitation no quarantine restrictions: be able to determine the tactics of management in preeclampsia, provide emergency care in case of an eclampsia attack.

**Topic 8. Miscarriage. Premature birth. Post-term pregnancy. Problem macrosomia in obstetrics.**

lect.2 "Miscarriage. Premature birth." (full-time course)

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

pr.tr.15 "Miscarriage. Premature birth." (full-time course)

The threat of premature birth: diagnosis, treatment, obstetric tactics. Prevention miscarriage. Tactics of premature birth. Study of this topic involves theoretical work in the classroom, in the simulation center. In the absence quarantine restrictions work in an obstetric hospital (continuation of skills development examination of the cervix in mirrors, pH-metry of vaginal contents to determine leakage of amniotic fluid, assessment of the degree of maturity of the cervix by Bishop). Application virtual simulation (watching movies demonstrating the clinical manifestations of the threat of premature childbirth). In addition, the study of this pathology involves role-playing games: practice skills to make a preliminary diagnosis of preterm birth and plan management tactics. Plan preventive measures at the risk of premature birth.

pr.tr.16 "Post-term pregnancy. The problem of macrosomia in obstetrics." (full-time course)

Etiology and pathogenesis of delayed pregnancy. Features of pregnancy and childbirth. Indications and conditions of induction of labor. Methods of induction of labor. Study of this topic involves theoretical work in the classroom, in the simulation center, application virtual simulation (watching movies with further discussion). In addition, when studying this topic involves the development of methods of preinduction and induction of labor (mechanical methods of preparation for childbirth: finger detachment around the membranes, introduction into the cervix of the Foley balloon catheter, the use of kelp, and medication intermediaries). Identification of signs confirming the transfer of pregnancy. Conducting the third period childbirth (obstetric phantom).

**Topic 9. Narrow pelvis. Anomalies of position and presentation of the fetus. Childbirth with the wrong position and pelvic presentation of the fetus.**

pr.tr.17 "Narrow pelvis. Anomalies of position and presentation of the fetus." (full-time course)

Anomalies of the pelvis. Classification, diagnosis. Diagnosis of synclitic and asynclitic inserting the head. Clinically narrow pelvis. Features of childbirth. Wrong position fetus: classification, diagnosis, tactics of pregnancy. Extension of the head fetus: classification, diagnosis. Correction of incorrect positions during pregnancy. Study this topic involves theoretical work in the classroom, in the simulation center (practice of skills of external and internal obstetric examination, application Leopold's techniques, mastering the technique of combined external-internal rotation of the fetus, extraction of the fetus by the leg, inguinal flexion, study and development of biomechanisms of childbirth in extensor presentation of the fetus)

.Determine the diagnostic criteria for a narrow pelvis (perform pelviometry). To diagnose a clinically narrow pelvis (on a phantom). Application virtual simulation (watching movies on the topic of the lesson with further discussion). In addition, when studying this topic, role-playing games, mastering the skills of examination, palpation are provided "One on one", conducting pelviometry to determine the size of the pelvis. Determination of indications to operative delivery in the wrong position and presentation of the fetus.

pr.tr.18 "Childbirth in the wrong position and pelvic presentation of the fetus." (full-time course)

Wrong position of the fetus: classification, diagnosis, tactics of pregnancy. Extensible presentation of the fetal head: classification, diagnosis. Correction of incorrect provisions during pregnancy. Childbirth in the wrong position and pelvic presentation fetus, management tactics. Classification of pelvic presentation of the fetus. Diagnosis and features pregnancy management. The study of this topic involves theoretical work in the classroom, in simulation center (practice of external and internal obstetric skills examination, application of Leopold's techniques, mastering the technique of correction of pelvic presentation during pregnancy. Study of the peculiarities of childbirth in pelvic presentation of the fetus. Working out of the biomechanism of childbirth at pelvic presentation of a fruit (on a phantom). Manual assistance with purely sciatic presentation by the method of Tsovyanov I. Classical manual assistance when removing the shoulder girdle. Derivation of the head by the method of Maurice-Levre-Lachapel. Manual assistance with foot presentation by the method of Tsovyanov II (on a phantom). to operative delivery at pelvic presentation of a fruit. Application of virtual simulations (watching movies on the topic of the lesson with further discussion). In addition, when the study of this topic involves role-playing games, mastering the skills of examination, palpation "one on one ", conducting pelviometry to determin

**Topic 10. Anomalies of contractile activity of the uterus.**

pr.tr.19 "Anomalies of contractile activity of the uterus." (full-time course)

Classification, risk factors, pathogenesis of various types of birth defects. Prevention of birth defects. The study of this topic involves theoretical work in the classroom, in the absence of quarantine restrictions - work in the delivery room, classes in simulation center (obstetric phantom). Practice of practical skills: definition readiness of the mother's body for childbirth; assessment of cervical maturity (scale of degrees of maturity cervix by E.H. Bishop). Mastering the methods of diagnosis and treatment of maternity disorders activities. Diagnosis of periods and phases of childbirth. The mechanism of contraction of the myometrium during contractions (contractions, retractions, distractions). The order of recording partograms. Monitoring of the fetus in childbirth. Methods of registration of uterine contractions and fetal heartbeat). Application of virtual simulation (watching movies on the topic of the lesson with further discussion).

**Topic 11. Obstetric bleeding during the first and second half of pregnancy, childbirth and postpartum period. Intensive care and resuscitation for bleeding in obstetrics.**

lect.3 "Obstetric bleeding during the second half of pregnancy, childbirth and postpartum period. Intensive care and resuscitation for bleeding in obstetrics." (full-time course)

Causes of obstetric bleeding during the second half of pregnancy, childbirth and postpartum period. Estimation of blood loss. Algorithm for providing emergency care in obstetrics bleeding. Intensive care and resuscitation for bleeding in obstetrics. Rendering algorithm emergency care for hemorrhagic shock. Pulmonary artery thromboembolism. Embolism amniotic fluid.

pr.tr.20 "Obstetric bleeding during the first and second half of pregnancy, childbirth and postpartum period." (full-time course)

Etiology and clinic of obstetric bleeding during the second half of pregnancy, in childbirth and the postpartum period. The study of this topic involves theoretical work in the school room, in an obstetric hospital (in the absence of quarantine restrictions), simulation center (practice of inspection skills, palpation), the use of virtual simulations (watching movies with further discussion). Master practical assessment skills volume of blood loss. Be able to develop an algorithm for providing emergency care in obstetrics bleeding.

pr.tr.21 "Intensive care and resuscitation for bleeding in obstetrics." (full-time course)

Intensive care and resuscitation for bleeding in obstetrics. Hemorrhagic shock. DIC syndrome. Pulmonary artery thromboembolism. Amniotic fluid embolism. Study of this topic provides theoretical work in the classroom, in an obstetric hospital (for no quarantine restrictions), in the simulation center, the use of virtual simulation (watching movies with further discussion). Master practical volume estimation skills blood loss. Be able to develop an algorithm for providing emergency care in obstetrics bleeding. Develop an algorithm for providing emergency care for hemorrhagic shock, DIC syndrome. Determination of the stage of DIC syndrome, evaluation of laboratory parameters. Study modern approaches to infusion-transfusion and intensive care and resuscitation pulmonary embolism, amniotic fluid embolism.

**Topic 12. Operative obstetrics. Childbirth injuries.**

lect.4 "Childbirth injuries. Obstetric operations." (full-time course)

Traumatic injuries of the vulva, vagina, perineum. Rupture of the cervix. Uterine rupture: classification, mechanism of occurrence. Clinical picture of uterine rupture. Features of uterine rupture behind the scar. Diagnosis, treatment and prevention. General concepts of surgical interventions in obstetrics: early and late termination of pregnancy. Operations for preparation birth canal (perino - and episiotomy, amniotomy). Obstetric forceps, vacuum extraction fetus, cesarean section: indications. Surgical interventions in sequential and postpartum period. Manual separation of the placenta, excretion of manure: technique. Manual and instrumental examination of the uterus after childbirth. Cesarean section. Absolute and relative impressions. Technique. Features of preoperative preparation and postoperative management patients. Indications for supravaginal amputation, uterine extirpation, internal ligation iliac arteries.

pr.tr.22 "Operative obstetrics." (full-time course)

General concepts of surgical intervention in obstetrics. Obstetric forceps, vacuum extraction fetus, cesarean section: indications. Surgical interventions in sequential and postpartum period. Indications for supravaginal amputation, uterine extirpation, internal ligation iliac arteries. The study of this topic involves theoretical work in the classroom, in conditions of the obstetric hospital (in the absence of quarantine restrictions), in the simulation center (practicing the skills of small obstetric operations: operations to prepare the birth canal (perino - and episiotomy, amniotomy); obstetric forceps, vacuum extraction of the fetus, manual separation of the placenta, excretion of manure: technique; manual and tool examination of the uterus after childbirth). Determination of absolute and relative indications for caesarean section autopsy. Study of caesarean section in the lower segment of the uterus. Features preoperative preparation and postoperative management of patients. Application of virtual simulations (watching movies with further discussion).

pr.tr.23 "Childbirth injuries." (full-time course)

Traumatic injuries of the vulva, vagina, perineum. Rupture of the cervix. Uterine rupture: classification, mechanism of occurrence. The clinical picture of uterine rupture: threatening, that started and has already taken place. Features of uterine rupture behind the scar. Diagnosis, treatment and prevention. Uterine inversion. Differences and ruptures of the pelvic joints. Postpartum fistulas. Etiology, treatment, prevention. The study of this topic involves theoretical work in classroom, in an obstetric hospital (in the absence of quarantine restrictions), simulation center (suturing of ruptures of the birth canal, mastering the technique of local anesthesia).

**Topic 13. Pregnancy and childbirth in extragenital diseases.**

pr.tr.24 "Pregnancy and childbirth with extragenital diseases" (full-time course)

Pregnancy and childbirth in diseases of the cardiovascular system (heart disease, hypertension diseases, arterial hypotension, diseases of the hematopoietic organs, diseases of the urinary organs systems; liver and gallbladder; respiratory organs; organs of the digestive system; endocrine systems; nervous system; organs of vision; acute and chronic infectious diseases, tuberculosis). The study of this topic involves theoretical work in the classroom, in Department of Extragenital Pathology of Pregnant Women (based on the Agreement between the clinical institution and University), in the simulation center, the use of virtual simulation (watching movies with further discussion)



pr.tr.25 "Pregnancy and childbirth with extragenital diseases." (full-time course)

The course of pregnancy and childbirth in gynecological diseases. Features of the course and tactics management in acute surgical pathology. The study of this topic involves theoretical work in classroom, in the Department of Extragenital Pathology of Pregnant Women (based on the Agreement between clinical institution and university), in the simulation center, the use of virtual simulations (watching movies with further discussion).

**Topic 14. Postpartum septic diseases. Perinatal infections. Prevention of vertical HIV transmission.**

lect.5 "Postpartum septic diseases." (full-time course)

Postpartum septic diseases: postpartum septic wound, postpartum metroendometritis, metrophlebitis, mastitis, postpartum peritonitis, peritonitis after cesarean section. Obstetric sepsis: classification etiology, pathogenesis, diagnosis, modern principles treatment, prevention. Septic shock, emergency care.

pr.tr.26 "Postpartum septic diseases. Perinatal infections. Prevention of vertical HIV transmission." (full-time course)

Postpartum septic diseases: postpartum septic wound, postpartum metroendometritis, metrophlebitis, mastitis, postpartum peritonitis, peritonitis after cesarean section autopsy. Obstetric sepsis: classification etiology, pathogenesis, diagnosis, modern principles treatment, prevention. Septic shock, emergency care. Methods of suppression of lactation. Perinatal infections in pregnant women: clinical course, diagnosis, management tactics, treatment, prevention. Principles of pregnancy and childbirth in women with HIV. Prevention of vertical HIV transmission. The study of this topic involves theoretical work in the classroom, in simulation center (work with phantoms), in the department of extragenital pathology (collection history, examination of pregnant women with perinatal infections), ultrasound room diagnostics (determination of ultrasound signs of fetal infection) the use of virtual simulations (watching movies with further discussion). Be able to develop a rendering algorithm emergency care for septic shock.

**Topic 15. Protection of educational history of childbirth. Final lesson from the module "Physiological and pathological course of pregnancy, childbirth and the postpartum period".**

pr.tr.27 "Protection of educational history of childbirth." (full-time course)

Examination of pregnant women, mothers and parturients under the supervision of a teacher. Participation in childbirth. Work with medical documentation. Protection of educational history of childbirth. Protection of medical history will be include questions about the peculiarities of history taking, methods of examination, analysis of childbirth and assessment of the condition of the newborn (ie, accordingly conducted curation). Independent curation course of physiological childbirth. Preparation for writing the history of physiological childbirth. If the absence of quarantine restrictions during the curation of the student is granted the right to be present at childbirth in the maternity hospital, which is located in the maternity ward of the medical institution. Student independently, but under the guidance of a teacher conducts a clinical examination of the mother. Results examinations with conclusions are made out by the student in the form of written work. Rules writing a medical history is regulated by relevant regulations. For a student they are set out in the guidelines of the department for writing educational history physiological childbirth. In the presence of quarantine, the student is provided with a virtual patient.

pr.tr.28 "Final lesson from the module "Physiological and pathological course of pregnancy, childbirth and postpartum period "" (full-time course)

The final lesson will include questions for the entire course of physiological and pathological obstetrics, including: theoretical questions, questions to computer test control, and also practice of practical skills in the simulation center (in the absence of quarantine restrictions at the patient's bedside).

## 7.2 Learning activities

LA1	Writing a medical history
LA2	Discussion of cases
LA3	Self-study
LA4	Preparation for current and final control
LA5	Preparation for practical classes
LA6	Solving situational tasks
LA7	Solve practical problems with the help of online technologies
LA8	E-learning in systems (Zoom, MIX.sumdu.edu.ua)
LA9	Preparation for certification
LA10	Watching movies
LA11	Preparing for Krok 2
LA12	Interpretation of laboratory (clinical analysis of blood, urine, biochemical analysis blood, immunological tests, etc.) and instrumental (CTG, CT, MRI, Ultrasound with Doppler blood flow, transvaginal cervicometry, determination of the biophysical profile of the fetus) methods of examination
LA13	Preparation of multimedia presentations
LA14	Individual research project (student research, article, these, etc.)
LA15	Practice of practical skills in the simulation center

## 8. Teaching methods

Course involves learning through:

TM1	Interactive lectures
TM2	Case-based learning (CBL). Training based on the analysis of a clinical case, situations
TM3	Team-based learning (TBL). Team-oriented training
TM4	Research-based learning (RBL). Learning through research
TM5	Role Playing game
TM6	Brainstorming
TM7	Educational discussion / debate

The discipline is taught using modern teaching methods (CBL, TBL, RBL), which not only promote the development of professional skills, but also stimulate creative and scientific activity and aimed at training practice-oriented specialists.

GC 1. Ability to abstract thinking, analysis, and synthesis. GC 2. Ability to learn, master modern knowledge, and apply the knowledge in practice. GC 3. Knowledge and understanding of the subject area and professional activity comprehension. GC 4. Ability to adapt and act in a new situation. GC 5. Ability to make reasoned decisions; teamwork ability; interpersonal skills. GC 6. Ability to communicate in a foreign language. GC 7. Ability to use information and communication technologies. GC 8. Determination and persistence on the tasks and commitments undertaken. GC 9. Ability to exercise one's 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; GC 10. Ability to maintain and multiply moral, cultural, scientific values and achievements of society based on understanding the history and development patterns of the subject area.

## 9. Methods and criteria for assessment

### 9.1. Assessment criteria

ECTS	Definition	National scale	Rating scale
	Outstanding performance without errors	5 (Excellent)	$170 \leq RD \leq 200$
	Above the average standard but with minor errors	4 (Good)	$140 \leq RD < 169$
	Fair but with significant shortcomings	3 (Satisfactory)	$120 \leq RD < 139$
	Fail – some more work required before the credit can be awarded	2 (Fail)	$0 \leq RD < 119$

### 9.2 Formative assessment

FA1	Protection of medical history
FA2	Interviews and oral comments of the teacher on his results
FA3	Self-assessment of current testing
FA4	Peer assessment
FA5	Solving situational tasks
FA6	Independent performance of situational exercises by students in practical classes and their discussion.
FA7	Defense of an individual research project (speech at a conference, competition of scientific works)
FA8	Testing

### 9.3 Summative assessment

SA1	Evaluation of written works, surveys, solving a clinical case
SA2	Protection of medical history

SA3	Testing
SA4	Final control: differentiated credit (according to the regulations carrying out)
SA5	Protection of an individual research project (incentive activities, additional points)

Form of assessment:

<b>8 semester</b>		<b>200 scores</b>
SA1. Evaluation of written works, surveys, solving a clinical case		<b>100</b>
		100
SA2. Protection of medical history		<b>10</b>
		10
SA3. Testing		<b>10</b>
		10
SA4. Final control: differentiated credit (according to the regulations carrying out)		<b>80</b>
	Answer to theoretical questions (3x15)	45
	Execution of a practical task	15
	Providing emergency care	20

Form of assessment (special cases):

<b>8 semester</b>		<b>210 scores</b>
SA1. Evaluation of written works, surveys, solving a clinical case		<b>110</b>
	In the case of quarantine restrictions, practical classes are held at remote mode using the platform Mix.sumdu.edu.ua, Zoom, Google meet.	100
	Ailments in quarantine carried out in a remote mode from the storage of platforms Mix.sumdu.edu.ua, Zoom, Google meet.	10
SA2. Protection of medical history		<b>10</b>
	In the case of quarantine restrictions, the exam is held in remote mode using the platform Mix.sumdu.edu.ua, Zoom, Google meet	10
SA3. Testing		<b>10</b>
	In the case of quarantine restrictions, testing is performed in remote mode using the platform Mix.sumdu.edu.ua.	10
SA4. Final control: differentiated credit (according to the regulations carrying out)		<b>80</b>
	У випадку карантинних обмежень іспит проводиться у дистанційному режимі із застосуванням платформи Mix.sumdu.edu.ua, Zoom, Google meet.	80

When mastering the materials of the student module for each practical lesson is assigned a maximum of 5 points (score is set in the traditional 4-point grading system). At the end of the training year, the arithmetic mean of student performance is calculated. The maximum number of

points that the student can receive in practical classes during the academic year - 110. Number of points student is calculated by the formula 110 multiplied by the arithmetic mean and divided by 5. By writing the history of the disease are assigned the following points: "5" - 5 points, "4" - 4 points, "3" - 3 points, "2" - 0 points. Protection of medical history: "5" - 5 points, "4" - 4 points, "3" - 3 points, "2" - 0 points. In general, for history illness student can get a maximum of 10 points, the minimum required score of 6. Maximum the number of points for the current educational activities of the student - 120. The student is admitted to the exam for conditions of fulfillment of the requirements of the curriculum and if for the current educational activity it scored at least 72 points: 66.0 points during practical classes and 6.0 points for writing history diseases. The exam is held according to the schedule at the end of the semester. Exam grade exhibited in the traditional 4-point grading system with subsequent translation into points, at the same time "5" corresponds to 80 points, "4" - 64 points, "3" - 48 points, "2" - 0 points. The exam is credited student if he scored at least 48 out of 80 points.

## 10. Learning resources

### 10.1 Material and technical support

MTS1	Information and communication systems
MTS2	Library funds, archive of radiographs, cardiocograms, computer tomograms, results of laboratory methods of inspection
MTS3	Computers, computer systems and networks
MTS4	Simulation center
MTS5	Medical facilities / premises and equipment (clinics, hospitals, etc.)
MTS6	Multimedia, video and sound reproduction, projection equipment (video cameras, projectors, screens, smart boards, etc.)
MTS7	Software (to support distance learning, Online surveys, virtual labs, virtual patients, to create computer graphics, modeling, etc., etc.)
MTS8	Medical equipment (fetal heart monitor, ultrasound machine, digital mammogram, laryngoscope, pinlon, height meter, scales, centimeter tape, tasometer, tonometer, obstetric stethoscope, etc.)

### 10.2 Information and methodical support

<b>Essential Reading</b>	
1	Obstetrics and gynecology: in two volumes: textbook. Vol.1 : Obstetrics / V. I. Gryshchenko, M. O. Shcherbina, B. M. Ventskiivskyi etc. ; edit. by: V.I. Gryshchenko, M.O. Shcherbina. — 2-nd edition. — K. : AUS Medicine Publishing, 2018. — 392 p
2	Obstetrics and gynecology: in two volumes: textbook. Vol.2 : Gynecology / V. I. Gryshchenko, M. O. Shcherbina, B. M. Ventskiivskyi etc. ; edit. by: V.I. Gryshchenko, M.O. Shcherbina. — 2-nd edition. — K. : AUS Medicine Publishing, 2018. — 352 p
3	Obstetrics/Gynecology: Lecture Notes / Editors W.G. Cvetnic, E. Pino. — New York : Kaplan, 2019. — 291 p.

4	Ostafiichuk, S. O. Lecture notes in obstetrics [Текст] : Ehe manual is designated for the English-speaking students of the 4-6 th courses of medical higher schools. / S. O. Ostafiichuk, N. I. Genyk. - Ivano-Frankivsk, 2016.
<b>Supplemental Reading</b>	
1	Hacker and Moore's Essentials of Obstetrics and Gynecology [Текст] / N. F. Hacker, J. C. Gambone, C. J. Hobel. — 6th edition. — Philadelphia : Elsevier, 2016. — 497 p.
2	Methodical Instructions for practical work on obstetrics (module I;Physiological obstetrics): for foreign students of the specialty 7.110101;Medical Care; of the full-time course of study / В. І. Бойко, М. Л. Кузьоме́нська, С. А. Сміян etc. — Суми
3	Obstetrics and gynaecology in 2 books [Текст] : підручник. Book 1 : Obstetrics/ V. M. Zaporozhan, V. P. Mishchenko. — Odessa : The Odessa State Medical University, 2013. — 374 с.
4	Obstetrics & gynecology [Текст] : texbook for students of institutions of higher medical education of the III-IV levels of acc.(MPHU). V.1 : Obstetrics / ed. by V.I. Gryshchenko /Gryshchenko V. I., Shcherbina M.O., Kaminskyi V.V., Markin L.V.