

# SYLLABUS

## 1. General information on the course

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| <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>  | Smiiian Svitlana Anatoliivna  |
| <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>   | 1 weeks across 11 semester  |
| <b>Workload</b>   | The amount is 4. 5 ECTS credits, 135 hours, of which 90 hours is contact work with the teacher (90 hours of practical training), 45 hours is independent work |
| <b>Language(s)</b>  | English   |

## 2. Place in the study programme

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| <b>Relation to curriculum</b>  | Compulsory course available for all students   |
| <b>Prerequisites</b>           | Krok-1, Human Anatomy, Biological and Medico-social Fundamentals of Health with the Content Module: Safety of Life; General and Age Physiology |
| <b>Additional requirements</b> | There are no specific requirements   |
| <b>Restrictions</b>            | There are no specific 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 (EPP)

## 4. Contents

Topic 1 Menstrual dysfunction in reproductive age, neuroendocrine syndromes. Physiological and pathological conditions in the perimenopausal period.

Menstrual disorders in reproductive age. Neuroendocrine syndromes in gynecology: premenstrual, menopausal, polycystic ovary syndrome, syndrome Sheehan, hyperandrogenism, hyperprolactinemia. Clinic, modern diagnostic methods and principles treatment. The concept of perimenopausal period. Physiological changes in the female genitals during perimenopause. Pathological conditions in the perimenopausal period. Omissions and prolapse of the walls of the vagina and uterus: diagnosis, treatment, prevention

Topic 2 Female urogenital inflammatory diseases

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

Topic 3 Benign neoplasms of the female genitals. Dyshormonal diseases breast. Genital endometriosis.

Benign neoplasms of the female genitals. Diagnosis, treatment and prevention. Dyshormonal diseases of the breast. Modern methods of diagnosis, treatment and prevention. Endometriosis. Modern aspects of etiopathogenesis, diagnosis, treatment, and prevention of endometriosis.

Topic 4 Background and precancerous diseases of the female genital organs. Malignant neoplasms female genitals.

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

Topic 5 Emergencies in gynecology. Surgical interventions in gynecology. Preparation and postoperative gynecological management patients with urgent and planned surgical interventions. Prevention of HIV infection.

Modern approaches to diagnosis and emergency care in acute abdomen. Modern approaches to diagnosis and emergency care for uterine bleeding. Basic principles and methods surgical interventions for emergencies in gynecology. Traumatic genital injuries bodies. Clinic diagnosis and treatment. Differential diagnosis with acute surgery pathology (appendicitis, intestinal obstruction, cholecystitis, renal colic, perforated gastric ulcer). Prevention of emergencies in gynecology.

Topic 6 Infertility. Modern aspects of family planning. Methods of contraception. Medical eligibility criteria use of WHO contraceptive methods.

Medical and social significance of the problem of infertility in marriage. Etiopathogenetic factors of development infertility. Examination of a married couple in a barren marriage. Modern principles and methods treatment of female infertility. Indications for the use of assisted reproductive technologies. Counseling on the choice and use of contraception: stages of counseling. Methods contraception according to periods of life. Modern methods of contraception: classification, mechanism actions, advantages, disadvantages, necessary examination before use, mode of use, side effects, instructions for the patient. Postpartum and post-abortion contraception. Medical WHO eligibility criteria: classification of categories, use of summary tables. Methods contraception in women with HIV.

Topic 7 Physiological pregnancy, childbirth and the postpartum period. Perinatal protection of the fetus. Pharmacotherapy in obstetrics.

Management of physiological pregnancy, childbirth and the postpartum period. Modern diagnostic methods condition of the fetus. Features of pharmacotherapy in different stages of pregnancy and in the postpartum period. Questions of medical ethics and deontology. Methods of contraception in the postpartum period.

Topic 8 Early gestosis. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia.

Etiology and pathogenesis of preeclampsia. Early gestosis (vomiting, hypersalivation). Clinic, diagnosis and treatment of early gestosis. Hypertension during pregnancy. Edema during pregnancy. Proteinuria during pregnancy. Preeclampsia. Eclampsia. Clinic, diagnosis, differential diagnosis, methods of treatment, the impact on the condition of the fetus. Rare forms of preeclampsia. Pregnancy management tactics, childbirth and the postpartum period in late preeclampsia. Emergency aid. Prevention of late preeclampsia and rehabilitation.

Topic 9 Premature termination of pregnancy. Postponement of pregnancy. Multiple pregnancy.

Etiology and pathogenesis of premature termination of pregnancy at different times. Classification, clinic, diagnosis, treatment and prevention of miscarriage. Premature birth. Features conducting premature births. Prevention of miscarriage. Etiology and pathogenesis postponement of pregnancy. Methods of diagnosis of pregnancy. The course of pregnancy and childbirth, effects on the fetus. Tactics of delayed pregnancy. Prevention and therapy carry-on complications. Multiple pregnancy: classification and diagnosis. Tactics of pregnancy and childbirth with multiple births. Feto-fetal transfusion syndrome, IDOF (intrauterine death of one fetus)

Topic 10 Bleeding during pregnancy, childbirth and the postpartum period. Hemorrhagic shock. DIC syndrome. Intensive care and resuscitation for bleeding in obstetrics.

Bleeding during pregnancy, childbirth and the postpartum period. Etiology, pathogenesis, clinic, diagnostics. Algorithm of actions of the doctor and methods of struggle against bleeding. Hemorrhagic shock. DIC syndrome. Modern approaches to infusion-transfusion and intensive care and resuscitation at bleeding in obstetrics.

Topic 11 Anomalies of the pelvis. The problem of macrosomia in modern obstetrics. Discrepancy fetal head and mother's pelvis. Incorrect positions and pelvic presentation of the fetus.

Anomalies of the pelvis. Childbirth with a narrow pelvis. Features of childbirth at large fruit. Tactics of childbirth with a large fetus, clinically narrow pelvis. Pregnancy and childbirth with pelvic presentation. Wrong position of the fetus. Methods of diagnosis and correction wrong position of the fetus. Features of obstetric tactics during pregnancy and childbirth depending on the type of presentation and position of the fetus.

Topic 12 Anomalies of contractile activity of the uterus. Maternity injuries of mother and fetus. Modern approaches to the diagnosis and treatment of maternal and fetal birth injuries.

Classification, etiology, pathogenesis of various types of anomalies of labor. Modern methods diagnosis and treatment of labor disorders. Prevention of maternity disorders activities. Maternal and fetal birth injuries, classification. Modern approaches to diagnostics and treatment of maternal and fetal birth injuries. Features of pregnancy and childbirth in women with scar on the uterus. Prevention of obstetric injuries.

Topic 13 Pregnancy and childbirth with extragenital diseases. Perinatal infections. Prevention of vertical transmission of HIV.

Pregnancy and childbirth in diseases of the cardiovascular system (heart disease, hypertension disease, hypotension); diseases of the urinary system; liver and bile bubble; diseases of the hematopoietic organs; 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. Perinatal infections in pregnant women: clinical course, diagnosis, management tactics, treatment, prevention. Principles of conduct pregnancy and childbirth in women with HIV. Prevention of vertical transmission of HIV.

Topic 14 Postpartum septic diseases. Surgical interventions in obstetrics. Immunological incompatibility of maternal and fetal blood. Anomalies of the fertilized egg

Postpartum septic diseases. Classification, etiology, pathogenesis, diagnosis, principles treatment, prevention. Emergency care for septic conditions in obstetrics. Indications for surgical treatment. Indications, contraindications, conditions and preparation for surgery in vaginal and abdominal delivery in obstetrics. The main stages of obstetric operations. Anesthesia operations. Tools. Asepsis and antiseptics. Management of the postoperative period. Immunological incompatibility of maternal and fetal blood (rhesus conflict, incompatibility according to the ABO system, isoleukocyte, etc.). Pathogenesis, diagnosis, management of pregnancy, selection of the optimal term childbirth. Management of childbirth and the postpartum period in immunological conflict. Prevention. Anomalies in the development of the fertilized egg. Anomalies of extraembryonic elements of the fetus eggs (placenta, amniotic membranes and umbilical cord). Trophoblastic diseases (bubble drift). Polyhydramnios and hypohydramnios: causes, clinic, tactics of pregnancy and childbirth, consequences for the fetus and newborn

Topic 15 Placental dysfunction, fetal developmental delay, fetal distress. Practice-oriented differential test

Etiology, pathogenesis of placental dysfunction, fetal distress, fetal developmental delay. Modern perinatal diagnostic technologies. Modern approaches to the tactics of adverse management of conditions of the fetus during pregnancy and childbirth. Diff test will include: answers to theoretical questions, questions to the computer test control, performance of a practical task, provision of emergency care.

## 5. Intended learning outcomes of the course

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

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| 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.  |

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| 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.

## **7. Teaching and learning activities**

### **7.1 Types of training**

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| <b>Topic 1. Menstrual dysfunction in reproductive age, neuroendocrine syndromes. Physiological and pathological conditions in the perimenopausal period.</b> |
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pr.tr.1 "Menstrual dysfunction in reproductive age, neuroendocrine syndromes. Physiological and pathological conditions in the perimenopausal period." (full-time course)

Classification of disorders of the reproductive system. Amenorrhea: classification, diagnostics. Abnormal uterine bleeding. Clinic, modern diagnostic methods and principles of treatment from the standpoint of evidence-based medicine. The problem of menstrual disorders functions at different ages. Modern methods of diagnosis and treatment. Study of this topic involves theoretical work in the classroom, in the simulation center (work with phantoms, training tables, gynecological tools), application virtual simulation (watching movies about neuroendocrine regulation of menstruation cycle) with further discussion. In the absence of quarantine restrictions, work in women's consultation (according to the agreement on cooperation between the medical institution and university)

pr.tr.2 ""Neuroendocrine syndromes in gynecology."" (full-time course)

Questions of gynecological endocrinology. Neuroendocrine syndromes in gynecology: premenstrual, menopausal, polycystic ovary syndrome, Sheehan's syndrome, hyperandrogenism, hyperprolactinemia. Clinic, modern diagnostic methods and principles treatment from the standpoint of evidence-based medicine. The study of this topic involves theoretical work in the study room, simulation center (work with phantoms, training tables, gynecological tools), the use of virtual simulation (watching movies with further discussion). In the absence of quarantine restrictions work in women's counseling with the development of counseling skills gynecological patients, conducting tests of functional diagnostics (according to the agreement on cooperation between the medical institution and the university)

pr.tr.3 ""Pathological conditions of the reproductive system in children and adolescents. Methods contraception for adolescents." (full-time course" (full-time course)

Anatomical and physiological features of the genitals of a girl in the process of formation reproductive system. Features of the survey of girls. Inflammatory diseases genitals in children and adolescents. Menstrual dysfunction. Tumors and injuries of the genitals. The study of this topic involves theoretical work in the study room, simulation center (work with the phantom, gynecological tools), the use of virtual simulation (watching thematic movies with further discussion). In the absence of quarantine restrictions work in the women's consultations with mastering of skills of consultative reception of gynecological patients, collection of gynecological and reproductive history, examination in mirrors, bimanual palpation (according to the agreement on cooperation between the medical institution and the university). Introduction to the features of vaginal surgery for genital prolapse (presence in the operating room with the teacher)

## **Topic 2. Female urogenital inflammatory diseases**

pr.tr.4 ""Inflammatory diseases of nonspecific etiology of the lower genitalia." (full-time course)

Etiology and ways of spread. Physiological barriers to spread inflammatory diseases in women. Classification of inflammatory diseases in women genitals by clinical course, by severity, by localization. Vulvitis, bartholinitis, colpitis, endocervicitis: clinical picture, diagnosis, treatment from the position evidence-based medicine. The study of this topic involves theoretical work in the school room, in the absence of quarantine restrictions work at the patient's bedside. Work in simulation center: practice practical skills in sampling for bacterioscopic examination. Application of virtual simulation (watching movies with smear techniques).

pr.tr.5 ""Inflammatory diseases of the upper female genitalia."" (full-time course)

Фактори ризику розвитку запальних захворювань органів малого таза. Алгоритм обстеження хворих із запальними захворюваннями органів малого таза. Ендометрит, сальпінгофорит, параметрит, пельвіоперитоніт: клінічна картина, діагностика, лікування з позиції доказової медицини. Вивчення даної теми передбачає теоретичну роботу в навчальній кімнаті, при відсутності карантинних обмежень робота біля ліжка хворого. Розв'язання клінічних кейсів, трактування результатів лабораторних та інструментальних методів обстеження, складання плану лікування з позиції доказової медицини.

pr.tr.6 ""Inflammatory diseases of the genitals of specific etiology"" (full-time course)

Candidiasis, trichomoniasis, gonorrhea, urogenital mycoplasmosis, ureaplasmosis, chlamydia, genital herpes, papillomavirus infection, genital tuberculosis: clinical picture, diagnosis, treatment from the standpoint of evidence-based medicine. The study of this topic involves theoretical work in the classroom, solving clinical cases, interpretation the results of laboratory methods of examination, drawing up a treatment plan from the standpoint evidence-based medicine.

### **Topic 3. Benign neoplasms of the female genitals. Dyshormonal diseases breast. Genital endometriosis.**

pr.tr.7 ""Доброякісні новоутворювання статевих органів жінки. ."" (full-time course)

Доброякісні пухлини зовнішніх статевих органів жінки. Доброякісні пухлини тіла матки: етіологія і патогенез, класифікація, клінічна картина, діагностика, лікування. Доброякісні утворення яєчників (кісти, кістоми): гістологічна класифікація, клінічна картина, діагностика, ускладнення, лікування. Вивчення даної теми передбачає теоретичну роботу в навчальній кімнаті, ознайомлення з методиками проведення та трактування лабораторних та даних ультразвукового обстеження органів малого таза у профільних відділеннях лікувального закладу (згідно з угодою про співпрацю між лікувальним закладом та університетом), застосування віртуальної симуляції (перегляд фото- та відеоматеріалів, фільмів) з подальшим їх обговоренням.

pr.tr.8 ""Dyshormonal diseases of the mammary glands."" (full-time course)

Basic gynecological aspects of breast diseases. Modern diagnostic methods, management tactics, treatment from the standpoint of evidence-based medicine and prevention. Study this topic involves theoretical work in the classroom, simulation center (work with the phantom of the breast), the use of virtual simulation (viewing) thematic films with further discussion). In addition, when studying this topic role-playing games are provided, in the absence of quarantine restrictions work at the bed patient in the profile departments of the medical institution (according to the agreement on cooperation between the medical institution and the university): mastering the skills of palpation breast, detection of pathological symptoms: nipple retraction, tissue compaction breast, detection of a symptom of a lemon peel, allocations from a nipple, increase axillary lymph nodes, work in the office of ultrasound diagnostics, distinguish breast tumors according to the Bi-RADS classification. Work in the mammography office: be able to interpret mammograms, distinguish pathological formations in the dairy gland.

pr.tr.9 ""Endometriosis."" (full-time course)

Genital endometriosis: epidemiology, etiology and pathogenesis, classification, clinical picture, diagnosis, treatment. The study of this topic involves theoretical work in classroom, the use of virtual simulation (watching movies from the specified pathology) with further discussion. In addition, when studying this topic provided, the solution of clinical problems, interpretation of laboratory results and instrumental methods of examination, answers to test tasks, drawing up a plan treatment from the standpoint of evidence-based medicine.

**Topic 4. Background and precancerous diseases of the female genital organs. Malignant neoplasms female genitals.**

pr.tr.10 ""Background diseases of the female genitals."" (full-time course)

Background diseases (cervical ectopia, benign transformation zone, subepithelial endometriosis, cervical polyps): Etiology, clinical picture, diagnostics. The study of this topic involves theoretical work in the classroom, acquaintance with methods of carrying out and interpretation of the received data of a colposcopy, hysteroscopy and ultrasound examination of the pelvic organs in profile departments of the medical institution (according to the agreement on cooperation between the medical institution and university). Virtual simulation (viewing photos, videos - colposcopic picture in various pathologies of the cervix, ultrasound signs endometrial polyps; films with hysteroresectoscopy) with further discussion. In simulation center to master the skills of taking swabs for a PAP test

pr.tr.11 ""Precancerous diseases of the female genitalia."" (full-time course)

Dysplasia of the cervix. Hyperplastic processes of the endometrium. Study of this topic involves theoretical work in the classroom, acquaintance with the methods conducting and interpreting the obtained data of colposcopy, hysteroscopy and ultrasound examination of the pelvic organs in the specialized departments of treatment institution (according to the agreement on cooperation between the medical institution and the university). Virtual simulation (viewing photos, videos - colposcopic picture at various pathologies of the cervix, ultrasound signs of endometrial polyps; movies from hysteroresectoscopy) with further discussion. In the simulation center skills of taking smears on the PAP test.

pr.tr.12 ""Malignant diseases"" (full-time course)

Злоякісні новоутворення зовнішніх жіночих статевих органів (рак вульви). Рак шийки матки. Рак тіла матки. Саркома матки. Рак яєчників. Рак маткової труби. Класифікація, клініка, діагностика, тактика ведення та принципи лікування з позиції доказової медицини. Трофобластичні захворювання. Вивчення даної теми передбачає теоретичну роботу в навчальній кімнаті, симуляційному центрі (робота з гінекологічним інструментарієм), застосування віртуальної симуляції (перегляд тематичних фільмів з подальшим обговоренням). Робота в жіночій консультації з освоєнням навиків консультативного прийому гінекологічних хворих, робота з кольпоскопом, освоїти навички цитологічного обстеження шийки матки, забір матеріалу для біопсії (згідно угоди про співпрацю між університетом та клінічним закладом, за умови відсутності карантинних обмежень)

**Topic 5. Emergencies in gynecology. Surgical interventions in gynecology. Preparation and postoperative gynecological management patients with urgent and planned surgical interventions. Prevention of HIV infection.**



pr.tr.13 ""Emergencies in gynecology."" (full-time course)

Ectopic pregnancy, ovarian apoplexy, torsion of the leg of the ovarian tumor, ruptures ovarian cysts: clinical picture, diagnosis and treatment. Differential diagnosis with acute surgical pathology. Prevention of emergencies in gynecology. The study of this topic involves theoretical work in the classroom, application virtual simulation (watching movies with different types of gynecological operations) with further discussion. In addition, the study provides solutions situational tasks, role-playing games, interpretation of laboratory and instrumental methods research, practice of practical skills in the simulation center (culdocentesis, instrumental abortion).

pr.tr.14 ""Випадіння жіночих статевих органів."" (full-time course)

Genital prolapse. Classification by degree of fallout. Clinical picture. Diagnosis. Treatment. Types of surgical interventions for lowering and prolapse of women genitals. The study of this topic involves theoretical work in the school room, simulation center (work with gynecological tools), application virtual simulation (watching movies with recordings of surgical interventions followed by discussion). In the absence of quarantine restrictions work in the gynecological department, small operating room with the development of practical skills of puncture through the posterior arch, endoscopic operating room, presence at operations (according to the agreement on cooperation between the medical institution and the university).

pr.tr.15 ""Surgical interventions in gynecology. Preparation and postoperative management gynecological patients with urgent and planned surgical interventions. HIV Prevention "" (full-time course)

Preoperative preparation of gynecological patients. Management of the postoperative period. Operations on the vaginal part of the cervix. Operations for lowering and prolapse of the genitals bodies. Gynecological operations on the appendages and uterus. Small gynecological operations. Endoscopic surgery (laparoscopy, hysteroresectoscopy). Acquaintance with features of preoperative preparation and postoperative gynecological management patients. Anesthesia during gynecological operations. Rehabilitation after gynecological interventions. The study of this topic involves theoretical work in the classroom, simulation center (work with gynecological tools), application virtual simulation (watching movies with recordings of surgical interventions followed by discussion). In the absence of quarantine restrictions work in the gynecological department, small operating room with the development of skills of puncture through the posterior arch, endoscopic operating room, presence at operations (according to the agreement on cooperation between medical institution and university).

**Topic 6. Infertility. Modern aspects of family planning. Methods of contraception. Medical eligibility criteria use of WHO contraceptive methods.**

pr.tr.16 "Infertility" (full-time course)

Medical and social support of the problem of infertility in marriage. Study of modern principles and methods of treatment of female infertility (hormonal, surgical, new reproductive technologies). Features of application of modern auxiliary reproductive technologies. Etiological factors of infertility development. Study of this topic involves theoretical work in the classroom, simulation center (work with gynecological tools), the use of virtual simulation (review thematic films with an algorithm for examining a married couple with infertility, application of assisted reproductive technologies with further discussion). By lack of quarantine restrictions work in a women's clinic with the development of skills consultative reception of gynecological patients, collection of gynecological and reproductive history, examination in mirrors, bimanual palpation (according to the agreement on cooperation between the medical institution and the university)

pr.tr.17 "Modern aspects of family planning" (full-time course)

Organization, structure and tasks of the family planning service. Advice on issues family planning: directions, benefits, counseling process. Family planning for people living with HIV. The study of this topic involves theoretical work in training room, simulation center (work with gynecological tools), application of virtual simulation (watching movies by features and methods counseling with further discussion). In the absence of quarantine restrictions work in the profile departments of the medical institution (according to the cooperation agreement between the medical institution and the university)

pr.tr.18 ""Methods of contraception. Medical criteria for the acceptability of the use of methods WHO contraception. "" (full-time course)

Classification, mechanism of action and effectiveness of modern contraceptives from the standpoint evidence-based medicine. The study of this topic involves theoretical work in the school room, simulation center (work with gynecological tools), application virtual simulation (watching movies on contraception followed by discussion). In the absence of quarantine restrictions work in the profile branches of a medical institution (according to the agreement on cooperation between medical institution and university). Introduction to modern methods of contraception: COCs, vaginal ring, contraceptive patch, PTP, injection, IUD, barrier methods and spermicides. Acquaintance with methods of fertility recognition, voluntary surgical sterilization, emergency contraception. Necessary examinations that are carried out in a planned manner before making a decision on use specific method of contraception.

**Topic 7. Physiological pregnancy, childbirth and the postpartum period. Perinatal protection of the fetus. Pharmacotherapy in obstetrics.**

pr.tr.19 ""Physiological pregnancy." (full-time course)

Physiology of pregnancy. Management of physiological pregnancy Modern methods diagnosis of the fetus during pregnancy. Features of pharmacotherapy in different stages of pregnancy. The study of this topic involves theoretical work in training room, in the simulation center (practice of skills - receptions Leopold, pelviometry, measurement of uterine floor height and abdominal circumference, auscultation fetal heartbeat, the use of virtual simulation (view films on methods of examination of the pregnant woman) with the subsequent discussion. By lack of quarantine restrictions work in the departments of the medical institution (according to agreement on cooperation between the medical institution and the university)

pr.tr.20 ""Physiological childbirth" (full-time course)

Physiology of childbirth. Biomechanism of childbirth. Conducting physiological childbirth according to the partogram. Modern methods diagnosis of the condition of the fetus in childbirth. The study of this topic involves theoretical work in training room, in the simulation center (skills development - auscultation fetal heartbeat, biomechanism of childbirth, application of virtual simulation (review films on the methods of vaginal delivery), followed by discussion. By lack of quarantine restrictions work in the departments of the medical institution (according to cooperation agreement between the medical institution and the university)

pr.tr.21 ""Postpartum period. Perinatal protection of the fetus. Pharmacotherapy Obstetrics "" (full-time course)

Physiology of the postpartum period. Management of the physiological postpartum period. Features of pharmacotherapy in postpartum period. Questions of medical ethics and deontology. Methods of contraception in postpartum period. The study of this topic involves theoretical work in classroom, in the simulation center (skills development - examination of the mammary glands, assessment of uterine involution), the use of virtual simulation (viewing films), followed by discussion. By lack of quarantine restrictions work in the departments of the medical institution (according to cooperation agreement between the medical institution and the university)

### **Topic 8. Early gestosis. Hypertensive disorders during pregnancy. Preeclampsia. Eclampsia.**

pr.tr.22 "Early gestosis" (full-time course)

Early gestosis: etiology, classification, clinical picture, diagnosis, treatment and tactics management of pregnancy from the standpoint of evidence-based medicine. Rare forms of early gestosis. The study of this topic involves theoretical work in the classroom, solving situational problems. the study of this topic involves role-playing games, evaluation of results laboratory examination. If possible, work at the patient's bedside in the profile branches of a medical institution (according to the agreement on cooperation between medical institution and university).

pr.tr.23 "Hypertensive disorders during pregnancy. Preeclampsia" (full-time course)

Etiology and pathogenesis of preeclampsia. Hypertensive disorders during pregnancy: classification, diagnosis. Preeclampsia. Clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, impact on the condition of the fetus. Rare forms of preeclampsia. Tactics of pregnancy, childbirth and postpartum period in late preeclampsia. Prevention of late preeclampsia and rehabilitation. When studying this topic involves theoretical work in the classroom, interpretation laboratory research methods, solving situational problems. In the absence quarantine restrictions work in the departments of the medical institution (according to the agreement on cooperation between the medical institution and the university).

pr.tr.24 ""Eclampsia."" (full-time course)

Eclampsia. Clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, impact on the condition of the fetus. Emergency care for eclampsia with positions of evidence-based medicine. Prevention of late preeclampsia and rehabilitation. When studying this topic involves theoretical work in the classroom, interpretation laboratory research methods, solving situational problems. In the absence quarantine restrictions work in the departments of the medical institution (according to the agreement on cooperation between the medical institution and the university).

**Topic 9. Premature termination of pregnancy. Postponement of pregnancy. Multiple pregnancy.**

pr.tr.25 "Miscarriage. Premature birth." (full-time course)

Miscarriage: etiology, classification of abortion in the early stages, clinical picture, diagnosis, treatment from the standpoint of evidence-based medicine. Premature birth: etiology, diagnosis, treatment from the standpoint of evidence-based medicine, obstetric tactics. Prevention miscarriage. The study of this topic involves theoretical work in the classroom, in the simulation center. In the absence quarantine restrictions work in an obstetric hospital (according to the agreement on cooperation): continuing to practice the skills of cervical examination in mirrors, conducting pH-metry of vaginal contents to determine amniotic fluid leakage waters, assessment of the degree of maturity of the cervix by Bishop). Application of virtual simulations (watching movies on the topic of the lesson). In the study of this pathology, role-playing games are provided: practice ability to put miscarriage and plan management tactics. Plan preventive measures at the risk of premature birth.

pr.tr.26 "Postponement of pregnancy." (full-time course)

Etiology and pathogenesis of delayed pregnancy. Features of pregnancy and childbirth. Indications and conditions, induction of labor. Methods of inducing childbirth. The study of this topic involves theoretical work in the classroom, in the simulation center. IN absence of quarantine restrictions works in obstetric hospital (according to the agreement on cooperation): continuation of practice of skills of inspection of a neck of uterus in mirrors, performance pH-metry of the contents of the vagina to determine the leakage of amniotic fluid, evaluation the degree of maturity of the cervix by the bishop). Application of virtual modeling (watching movies on the topic of the lesson) with their subsequent discussion. In the study this pathology provides role-playing games: to practice the ability to make a preliminary diagnosis tactics The development of methods of preliminary induction and induction of labor is envisaged (mechanical methods of preparation for childbirth: detachment of the fingers of the amniotic membranes, introduction of a balloon catheter of the cervix Foley, the use of kelp and intermediaries for medication). Identification of signs confirming the transfer of pregnancy.

pr.tr.27 ""Multiple pregnancy" (full-time course)

Multiple pregnancy: classification and diagnosis. Tactics of pregnancy and childbirth with multiple births. Feto-fetal transfusion syndrome, intrauterine fetal growth retardation (IFGR), intrauterine death of one fetus. In the study of this pathology, role-playing games are provided: practice skills to make a preliminary diagnosis of premature birth and plan management tactics. Plan preventive measures at the risk of premature birth. It is assumed development of methods of preinduction and induction of labor (mechanical methods preparation for childbirth: finger detachment around the membranes, the introduction of cervix of the Foley balloon catheter, the use of kelp, and medication intermediaries). Childbirth in multiple pregnancies.

**Topic 10. Bleeding during pregnancy, childbirth and the postpartum period. Hemorrhagic shock. DIC syndrome. Intensive care and resuscitation for bleeding in obstetrics.**

pr.tr.28 "Bleeding during pregnancy" (full-time course)

Etiology and clinic of obstetric bleeding during pregnancy. Bleeding in the first half of pregnancy (miscarriage, ectopic pregnancy, premature detachment and placenta previa). Etiology, pathogenesis, clinic, diagnosis. Pre-presentation and premature exfoliation is normal located placenta: etiology, pathogenesis, classification, clinic, diagnosis, features of the course, management of pregnancy and childbirth. Kuveler's uterus. The study of this topic involves theoretical work in the classroom, simulation center (use of obstetric phantom for childbirth, training tables, medical instruments - obstetric curette, application of virtual simulation (viewing of thematic films with methods of stopping bleeding) with further discussion. In the absence of quarantine restrictions, work in relevant departments of the clinical institution (according to the cooperation agreement between medical institution and university). Master practical volume estimation skills blood loss, examination of the birth canal, instrumental revision of the cavity uterus,)

pr.tr.29 ""Bleeding in childbirth and in the postpartum period."" (full-time course)

Etiology and clinic of obstetric bleeding in childbirth and postpartum period. Presentation and premature detachment of the normally located placenta: etiology, pathogenesis, classification, clinic, diagnosis, features of the course, management pregnancy and childbirth. Kuveler's uterus. Uterine bleeding in childbirth, sequential and early postpartum period. Methods to stop bleeding. Study of this topic involves theoretical work in the classroom, simulation center (use obstetric phantom for childbirth, training tables, medical tools - obstetric curette, Foley catheter), the use of virtual simulation (viewing thematic films with methods of stopping bleeding) with the subsequent discussion. In the absence of quarantine restrictions, work in the relevant departments clinical institution (according to the agreement on cooperation between the medical institution and university). Master practical skills in assessing the amount of blood loss, maternity examination pathways, manual and instrumental revision of the uterine cavity, manual separation and manure removal, bimanual compression of the uterus, compression of the abdominal aorta)

pr.tr.30 ""Hemorrhagic shock. DIC syndrome. 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. The study of this topic involves theoretical work in the classroom, simulation center, the use of virtual simulation (watching movies with rendering algorithms intensive care and resuscitation for bleeding in obstetrics) with further discussion. In the absence of quarantine restrictions, work in the departments of the medical institution (according to agreements on cooperation between the medical institution and the university): work in delivery room, intensive care unit. Master practical volume estimation skills blood loss. Be able to develop an algorithm for providing emergency care obstetric bleeding. Develop an algorithm for providing emergency care when hemorrhagic shock, DIC syndrome. Determination of the stage of DIC syndrome, evaluation laboratory parameters. Study of modern approaches to infusion and transfusion and intensive care and resuscitation for pulmonary embolism, embolism amniotic fluid.

**Topic 11. Anomalies of the pelvis. The problem of macrosomia in modern obstetrics. Discrepancy fetal head and mother's pelvis. Incorrect positions and pelvic presentation of the fetus.**

pr.tr.31 "Pelvic anomalies. The problem of macrosomia in modern obstetrics. Inconsistency fetal head and mother's pelvis." (full-time course)

Anomalies of the pelvis. Classification, diagnosis. Diagnosis of synclitic and asynclitic insertion of the head. The problem of macrosomia in obstetrics. Clinically narrow pelvis. Features of childbirth. Wrong position of the fetus: classification, diagnosis, tactics of pregnancy. Extensible presentation of the fetal head: classification, diagnosis. Correction of incorrect positions during pregnancy. Childbirth in the wrong position of the fetus, tactics. The study of this topic involves theoretical work in the classroom, simulation center (skills development external and internal obstetric examination, application of techniques Leopold, mastering the technique of combined external-internal rotation of the fetus, extraction of the fetus by the leg, by inguinal flexion, study and development of biomechanisms childbirth with extensor presentation of the fetus using an obstetric phantom). To diagnose a clinically narrow pelvis (a sign of Vasten, Tsangenmeister). Application of virtual simulation (watching movies on the topic of the lesson with the subsequent discussion). In addition, the study of this topic provides role-playing games, mastering the skills of examination, palpation "one on one", conducting pelviometry. By lack of quarantine restrictions work in the departments of the medical institution (according to cooperation agreements between the medical institution and the university).

pr.tr.32 "Incorrect position and 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 wrong positions during pregnancy. Childbirth in the wrong position of the fetus, driving tactics. The study of this topic involves theoretical work in the classroom, simulation center (practice of external and internal skills obstetric examination, the use of Leopold's techniques, mastering the technique combined external-internal rotation of the fetus, the study and development of biomechanisms of childbirth during extension presentation of the fetus using an obstetric phantom). 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", pelviometry. In the absence of quarantine restrictions work in the departments of the medical institution (according to the agreement on cooperation between medical institution and university)

pr.tr.33 "Pelvic presentation of the fetus" (full-time course)

Pelvic presentation of the fetus: etiology, classification, diagnosis, pregnancy, childbirth. The study of this topic involves theoretical work in the classroom, simulation center (skills development external and internal obstetric examination, application of techniques Leopold, extraction of the fetus by the leg, by inguinal flexion, study and development of biomechanisms of childbirth with pelvic presentation of the fetus using an obstetric phantom).

**Topic 12. Anomalies of contractile activity of the uterus. Maternity injuries of mother and fetus. Modern approaches to the diagnosis and treatment of maternal and fetal birth injuries.**

pr.tr.34 "Anomalies of contractile activity of the uterus." (full-time course)

Classification, etiology, pathogenesis of various types of anomalies of labor. Modern methods of diagnosis and treatment of labor disorders. Prevention of violations labor. The study of this topic involves theoretical work in the classroom, application of virtual simulation (watching movies on this pathology) with further discussion. In addition, the study of this topic provides a solution situational tasks. Interpretation of partograms, appointment of treatment from the position of evidence medicine and determining further tactics of childbirth.

pr.tr.35 "Maternity injuries of the mother. Modern approaches to diagnosis and treatment maternal injuries of the mother." (full-time course)

Causes of maternity injuries of the mother. Ruptures of the cervix, vagina, perineum: classification, diagnosis, treatment. Uterine ruptures during pregnancy and childbirth: epidemiology, classification, etiology and pathogenesis, clinical picture depending on etiological factor. Diagnosis and treatment from the standpoint of evidence-based medicine. Features of pregnancy and childbirth in women with a scar on the uterus. Prevention obstetric injuries. The study of this topic involves theoretical work in classroom, the use of virtual simulation (watching movies from the specified pathology) with further discussion. In addition, the study of this topic provides solving situational problems. Interpretation of partograms, appointment of treatment from a position evidence-based medicine and determining further tactics of childbirth.

pr.tr.36 "Obstetric trauma of the fetus. Modern approaches to diagnosis and treatment." (full-time course)

Newborn birth trauma: etiology, classification, clinical picture, diagnosis. Treatment of fetal birth injuries. Prevention of obstetrics newborn injuries. The study of this topic involves theoretical work in the classroom, application of virtual simulation (watching movies on this pathology) with further discussion. In addition, the study of this topic provides a solution situational tasks. Interpretation of partograms and determination of further tactics of childbirth.

**Topic 13. Pregnancy and childbirth with extragenital diseases. Perinatal infections. Prevention of vertical transmission of HIV.**

pr.tr.37 "Pregnancy and childbirth with extragenital diseases" (full-time course)

Pregnancy and childbirth in diseases of the cardiovascular system (heart disease, hypertension, hypotension, hematopoietic diseases, diseases organs of the urinary system; liver and gallbladder; respiratory organs; bodies digestive system; endocrine system; nervous system; organs of vision; sharp and chronic infectious diseases, tuberculosis, gynecological diseases. Features of the course and tactics of management in acute surgical pathology. Study this topic involves theoretical work in the classroom, the use of virtual simulation (watching movies with algorithms for managing pregnant women with extragenital pathology) with further discussion. In the absence of quarantine restrictions work at the patient's bedside in the departments of the medical institution (according to the cooperation agreement between the medical institution and the university)

pr.tr.38 "Perinatal infections." (full-time course)

Toxoplasmosis, rubella, urogenital mycoplasmosis, chlamydia, herpes and cytomegalovirus infection, infection caused by group B streptococcus - etiology, pathogenesis, classification, clinical picture, diagnosis, prevention, obstetrics tactics and treatment. The study of this topic involves theoretical work in the school room, solving clinical cases, interpreting the results of laboratory methods research. In the absence of quarantine restrictions, work in medical departments institution (according to the agreement on cooperation between the medical institution and the university)

pr.tr.39 "Prevention of vertical transmission of HIV." (full-time course)

Clinical classification of HIV infection in adults. Examination of pregnant women. Ways of transmission HIV from mother to child. Risk factors that increase the frequency of HIV transmission from the mother to the child. Basic principles of prevention of mother-to-child transmission of HIV (STIs). Clinical scenarios of PPMD. Prophylactic ART during pregnancy and childbirth according to the clinical scenario. Childbirth in pregnant women with HIV. The study of this topic involves theoretical work in the classroom, solutions situational tasks, planning obstetric tactics of pregnancy and childbirth.

**Topic 14. Postpartum septic diseases. Surgical interventions in obstetrics. Immunological incompatibility of maternal and fetal blood. Anomalies of the fertilized egg**

pr.tr.40 ""Postpartum septic diseases" (full-time course)

Postpartum septic diseases: postpartum septic wound, postpartum metroendometritis, metrophlebitis. Etiology, pathogenesis, diagnosis, modern principles treatment from the standpoint of evidence-based medicine, prevention. Postpartum septic diseases: postpartum peritonitis, peritonitis after cesarean section, mastitis. Obstetric sepsis: classification etiology, pathogenesis, diagnosis, modern principles of treatment from the standpoint of evidence-based medicine, prevention. Septic shock, emergency care. Methods of suppression of lactation. Role play. Interpretation of laboratory results and ultrasound, compilation algorithm for providing emergency care in septic shock. The study of this topic involves theoretical work in the classroom, simulation center (work with obstetrics phantom), the use of virtual simulation (watching movies with the main clinical manifestations of postpartum septic infection) with further discussion. By lack of quarantine restrictions work in the departments of the medical institution (according to cooperation agreements between the medical institution and the university). Role play.



pr.tr.41 "Surgical interventions in obstetrics." (full-time course)

General concepts of surgical intervention in obstetrics. Obstetric forceps, vacuum extraction of the fetus, cesarean section: indications. Surgical interventions in the sequential and the postpartum period. Indications for supravaginal amputation, uterine extirpation, ligation of internal iliac arteries. The study of this topic involves theoretical work in the study room, simulation center (practice of small skills obstetric operations on the phantom: operations to prepare the birth canal (perineo- and episiotomy, amniotomy); obstetric forceps, vacuum extraction of the fetus, manual separation of the placenta, excretion of manure: technique; manual and instrumental examination of the uterus after childbirth). In the absence of quarantine restrictions work in the departments of the medical institution (according to the agreement on cooperation between medical institution and university): work in the obstetrics department, obstetrics operating room. Determination of absolute and relative indications for cesarean section. Mastering the methods of preoperative preparation and postoperative management of patients. Study of caesarean section in the lower segment of the uterus, the technique of imposition obstetric forceps and vacuum extractor using virtual simulation (watching videos with further discussion).

pr.tr.42 "Immunological incompatibility of maternal and fetal blood. Anomalies of the fertilized egg" (full-time course)

Isoantigenic incompatibility of maternal and fetal blood (rhesus conflict, incompatibility ABO system, isoleukocyte, etc.). Hemolytic disease of the fetus and newborn. Indications for premature birth in rhesus conflict. Anomalies of extraembryonic elements of the fertilized egg / placenta, amniotic membranes and umbilical cord. Polyhydramnios and hypohydramnios: causes, diagnosis, management tactics pregnancy, consequences for the fetus and newborn. Hereditary and congenital diseases fetus. Diagnosis. Indications for medical and genetic counseling Study of this topic involves theoretical work in the classroom, the use of virtual simulation (watching movies demonstrating the clinical manifestations of major diseases) with further discussion. In addition, the study of this topic provides solutions clinical cases, drawing up a plan of examination with further interpretation of the received results of ultrasound and laboratory tests, determination of obstetric tactics, treatment and prevention from the standpoint of evidence-based medicine. FGDS and treatment.

### **Topic 15. Placental dysfunction, fetal developmental delay, fetal distress. Practice-oriented differential test**

pr.tr.43 "Placental dysfunction, fetal developmental delay," (full-time course)

Placental dysfunction, fetal developmental delay: risk factors, classification, diagnosis, tactics of pregnancy, prevention. Diagnostic methods condition of the fetus: non-invasive - ultrasound, CTG, biophysical profile of the fetus, Doppler, MRI; invasive - amniocentesis, cordocentesis, chorionic villus sampling. The study of this topic involves theoretical work in the study room, simulation center (mastering practical skills in obstetric phantom). Work with the use of virtual simulation (watching movies with methods of diagnosing the condition of the fetus) with further discussion. By conditions of absence of quarantine restrictions work in profile departments of medical institution with medical equipment: fetal heart monitor, ultrasound machine diagnostics, etc. (according to the agreement on cooperation between the medical institution and university).

pr.tr.44 "Fetal distress" (full-time course)

Fetal distress: risk factors, classification, diagnosis, tactics of pregnancy, prevention. Diagnostic methods condition of the fetus: non-invasive - ultrasound, CTG, biophysical profile of the fetus, Doppler, MRI; invasive - amniocentesis, cordocentesis, chorionic villus sampling. The study of this topic involves theoretical work in the study room, simulation center (mastering practical skills in obstetric phantom). Work with the use of virtual simulation (watching movies with methods of diagnosing the condition of the fetus) with further discussion. By conditions of absence of quarantine restrictions work in profile departments of medical institution with medical equipment: fetal heart monitor, ultrasound machine diagnostics, etc. (according to the agreement on cooperation between the medical institution and university).

pr.tr.45 "Practice-oriented differential test" (full-time course)

Diff credit will include: questions to the computer test control, performance practical task, providing emergency care.

## 7.2 Learning activities

|      |   |
|------|---|
| LA1  | Preparing for Krok 2  |
| LA2  | Self-study  |
| LA3  | Interpretation of laboratory (clinical analysis of blood, urine, biochemical analysis blood, hormonal research, etc.) and instrumental (colposcopy, hysteroscopy, mammography, MRI, CT, radiography, CTG, ultrasound Doppler blood flow, transvaginal cervicometry, determination biophysical profile of the fetus) examination methods |
| LA4  | Preparation for practical classes   |
| LA5  | Preparation of multimedia presentations   |
| LA6  | Solve practical problems with the help of online technologies   |
| LA7  | E-learning in systems (Zoom, MIX.sumdu.edu.ua)  |
| LA8  | Practice of practical skills in the simulation center   |
| LA9  | Watching educational movies   |
| LA10 | Analysis of clinical cases  |
| LA11 | Practical work with the patient in the specialized departments of the hospital  |
| LA12 | Individual research project (student research, article, these, etc.)  |
| LA13 | Work with textbooks and relevant information sources  |
| LA14 | Preparation for the final differentiated test   |

## 8. Teaching methods

Course involves learning through:

|     |  |
|-----|--|
| TM1 | Case-based learning (CBL). Training based on the analysis of a clinical case, situations |
| TM2 | Practice-oriented learning   |

|     |  |
|-----|--|
| TM3 | Educational discussion / debate                          |
| TM4 | Brainstorming  |
| TM5 | Role Playing game  |
| TM6 | Team-based learning (TBL). Team-oriented training        |
| TM7 | Research-based learning (RBL). Learning through research |

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 | Teacher's instructions in the process of performing practical tasks  |
| FA2 | Peer assessment  |
| FA3 | Solving situational problems with Krok-2   |
| FA4 | Testing  |
| FA5 | Defense of an individual research project (speech at a conference, competition of scientific works)          |
| FA6 | Independent performance by students of situational exercises on practical ones classes and their discussion. |

|     |  |
|-----|--|
| FA7 | Interviews and oral comments of the teacher on his results |
| FA8 | Solving clinical cases                                     |
| FA9 | Checking and evaluating written assignments                |

### 9.3 Summative assessment

|     |  |
|-----|--|
| SA1 | Evaluation of written works, surveys, solving a clinical case                          |
| SA2 | Testing  |
| SA3 | Protection of an individual research project (incentive activities, additional points) |
| SA4 | Execution of a practical case (preparation, presentation, defense)                     |
| SA5 | Final control: diff. test  |

Form of assessment:

| 11 semester   |  | 200 scores |
|---|--|------------|
| SA1. Evaluation of written works, surveys, solving a clinical case      |  | <b>100</b> |
|   |  | 100        |
| SA2. Testing  |  | <b>10</b>  |
|   |  | 10         |
| SA4. Execution of a practical case (preparation, presentation, defense) |  | <b>10</b>  |
|   |  | 10         |
| SA5. Final control: diff. test  |  | <b>80</b>  |
|   | Answer to theoretical questions (3x15) | 45         |
|   | Execution of a practical task          | 15         |
|   | Providing emergency care               | 20         |

Form of assessment (special cases):

| 11 semester  |   | 200 scores |
|--|---|------------|
| SA1. Evaluation of written works, surveys, solving a clinical case |   | <b>120</b> |
|  | In case of quarantine restrictions, practical classes are carried out in a remote mode with application platform Mix.sumdu.edu.ua, Zoom, Google meet. | 120        |
| SA5. Final control: diff. test                                     |   | <b>80</b>  |
|  | In case of quarantine restrictions, practical classes are carried out in a remote mode with application platform Mix.sumdu.edu.ua, Zoom, Google meet. | 80         |

When mastering the materials of the student module for each practical lesson is assigned maximum 5 points (score is set in the traditional 4-point grading system). At the end of the academic year, the arithmetic mean of student performance is calculated. The maximum number of points that a student can receive in practical classes during academic year - 100. The number of student points is

calculated by the formula 100 multiplied on the arithmetic mean and divide by 5. For diagnostic testing the student receives maximum 10 points. The minimum number of points that a student must receive is 6 points. The maximum number of points for the current educational activities of the student - 120. Student allowed to diff. offset provided that the requirements of the curriculum are met and if for the current educational activity he scored at least 72 points: 60 points during practical classes, 6 points for the practical case (preparation, presentation, defense) and 6 points for testing. Diff. the offset is made according to the schedule at the end of the cycle. Tickets contain 3 theoretical questions on various topics and cover all sections of the curriculum disciplines (15 points each), 1 practical task (15 points) and the issue of provision emergency care (20 points). The credit is credited to the student if he scored at least 48 points out of 80. Incentive points are added to the grade in the discipline for performance individual research project (defense of student science work 12 points, speech at the conference 5 points, poster presentation at the conference 4 points, abstracts 3 points). The total score in the discipline may not exceed 200 points.

## 10. Learning resources

### 10.1 Material and technical support

|      |   |
|------|---|
| MTS1 | Information and communication systems   |
| MTS2 | Library funds, archive of radiographs, cardiotocograms, computer tomograms, results of laboratory methods of inspection   |
| MTS3 | Computers, computer systems and networks  |
| MTS4 | Simulation center (obstetric phantom, phantom of the newborn child for primary resuscitation with a set of equipment)   |
| MTS5 | Regional clinical perinatal center, Clinical maternity hospital of the Blessed Virgin Mary , MedSoyuz Medical Center  |
| MTS6 | Multimedia, video and sound reproduction, projection equipment (video cameras, projectors, screens, laptops)  |
| MTS7 | Програмне забезпечення (для підтримки дистанційного навчання, Інтернет-опитування, віртуальних лабораторій, віртуальних пацієнтів, для створення комп'ютерної графіки, моделювання тощо та ін.)   |
| MTS8 | Medical equipment (fetal heart monitor, ultrasound machine, digital mammogram, laryngoscope, pinlon, height meter, scales, centimeter tape, tasometer, tonometer, obstetric stethoscope, colposcope, exercise machine for introduction of the IUD, a set for gynecological examination, cervical brushes, slides, hysteroscope, laparoscopic rack)) |

### 10.2 Information and methodical support

| Essential Reading |   |
|-------------------|---|
| 1                 | Obstetrics and gynecology: in two volumes: textbook. Vol.1 : Obstetrics / V. I. Gryshchenko, M. O. Shcherbina, B. M. Ventskiivskiyi 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                           | William Gynecology, Fourth Edition by Barbara L. Hoffman, John O.Schorge, Lisa M. Halvorson, Cherine A. Hamid, Marlen M. Corton, Joseph I. Schaffer. Mc Graw-Hill Education. New York. 2020. 1253 p   |
| 5                           | Oxford Texbook of Obstetrics and Gynecology / Sabaratram Arulkumaran, Wiliam Ledger, Lynette Denny, Stergios Doumouchtsis – Oxford University Press, 2020, 928 p.   |
| <b>Supplemental Reading</b> |   |
| 1                           | 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 |
| 2                           | Te Linde's Operative Gynecology. Twelft edition. Victoria L. Handa, Linda Van Li. Hardcover edition. New York. 2019. 339 p  |
| 3                           | 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.      |
| 4                           | Gynaecology by Ten Teachers [Текст] / Ed.: A. Monga, S. Dobbs. — 19th edition. —Hodder Arnold, 2011. — 206  |