1. General information on the course

Full course name	Obstetrics and Gynecology	
Full official name of a higher education institution	Sumy State University	
Full name of a structural unitMedical Institute. Department of Obstetrics Gynecology and Family Planning		
Author(s)	Boiko Alesia Valeriivna	
Cycle/higher education level	The Second Level Of Higher Education, National Qualifications Framework Of Ukraine – The 7th Level, QF-LLL – The 7th Level, FQ-EHEA – The Second Cycle	
Semester	2 weeks across 10 semester	
Workload	The amount is 3 ECTS credits, 90 hours, of which 46 hours is contact work with the teacher (40 hours of practical classes and 10 hours of lectures), 70 hours is an independent work	
Language(s)	English	

2. Place in the study programme

Relation to curriculum	Compulsory course available for study programme "Medicine"	
Prerequisites	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, - nursing practices, - radiology.	
Additional requirements	There are no specific requirements	
Restrictions	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

Module 2. Diseases of the female reproductive system. Family planning.

Topic 1 Anatomy and physiology of the female genitalia. Methods of examination of gynecological patients.

General symptomatology of gynecological diseases. Clinical anatomy of female genitals. External genitalia. Internal genitals. Circulation, lymph circulation and innervation of female genitals. Age features of anatomy and physiology of the female genitals. Neuroendocrine regulation of reproductive system functions. The main methods of examination in gynecology: examination of the external genitalia, research using mirrors, bimanual examination. Additional methods of examination in gynecology. Methods functional diagnosis of ovarian condition. Radiation diagnostic methods in gynecology: MRI, CT, MSG. Ultrasound research methods in gynecology. Instrumental methods of examination: probing of the uterine cavity, scraping of the uterine cavity, biopsy of the endometrium, cervix, puncture of the abdominal cavity through the posterior arch. Endoscopic research methods: colposcopy, hysteroscopy, laparoscopy. Laboratory diagnosis: oncocytology, bacterioscopy, bacteriology, LIA, PCR, pathomorphological examination. General symptomatology of gynecological diseases (pain, whites, menstrual disorders, bleeding, sexual disorders, infertility, disorders of related organs).

Topic 2 Neuroendocrine regulation. Dysfunction of the reproductive system.

Neuroendocrine syndromes in gynecology. Classification of disorders of the reproductive system. Amenorrhea: classification, diagnosis. Abnormal uterine bleeding. Clinic, modern diagnostic methods and principles treatment. The problem of menstrual dysfunction at different ages. Modern methods diagnosis and treatment. Questions of gynecological endocrinology. Neuroendocrine syndromes in gynecology: premenstrual, menopausal, polycystic ovary syndrome, syndrome Sheehan, hyperandrogenism, hyperprolactinemia. Clinic, modern diagnostic methods and principles treatment.

Topic 3 Benign tumors of the female genitalia. Genital endometriosis. Gynecological aspects of breast disease.

Benign tumors and tumor-like diseases of the female genitalia. The concept of cysts and ovarian tumors. Bartholin's cyst. Benign ovarian tumors: epithelial, tumors genital stroma, lipid-cell tumors, germinogenic tumors. Tumor-like ovarian formation. Benign tumors of the uterus. Clinic, modern methods of diagnosis, treatment and prevention. The problem of endometriosis. Modern etiopathogenetic aspects of endometriosis. Classification. Clinic. Methods of diagnosis, treatment and prevention of women with endometriosis. Basic gynecological aspects of breast diseases. Modern methods of diagnosis, tactics of management, treatment and prevention.

Topic 4 Background and precancerous diseases of the female genitalia. Malignant neoplasms genitals. Trophoblastic diseases.

Background and precancerous diseases of the external genitalia. Background and precancerous cervical disease: classification. Hyperplastic processes of the endometrium: etiology, pathogenesis, classification, modern diagnostic methods, management tactics and principles of treatment. Prevention of background and precancerous diseases of the female genitalia. Malignant neoplasms of the external female genitalia (vulvar cancer). Cervical cancer. Cancer of the uterine body. Uterine sarcoma. Ovarian cancer. Uterine cancer. Classification, clinic, diagnosis, tactics management and principles of treatment. Trophoblastic diseases. Modern diagnostic methods, management and principles of treatment and prevention.

Topic 5 Inflammatory diseases of the female genital organs.

The concept of vaginal microbiocinosis. Etiology, pathogenesis, classification of inflammatory diseases in women genitals. Inflammatory diseases of nonspecific (vulvitis, bartholinitis, vaginitis, endocervicitis, endometritis, adnexitis, parametritis, pelvioperitonitis) and specific etiology. Tuberculosis female genitals. Modern approaches to diagnosis and treatment. Diseases that sexually transmitted (trichomoniasis, gonorrhea, candidiasis, viral lesions, urea-, mycoplasmosis, chlamydia). Diagnosis, treatment and prevention of transmitted diseases sexually. Modern principles of treatment of acute and chronic inflammatory processes in women genitals. Management of patients with purulent tuboovarian tumor. Indications to surgical treatment. Features of the course of inflammatory diseases of the female genital organs in different age periods, driving tactics. Rehabilitation of women who have undergone inflammatory processes.

Topic 6 Emergencies in gynecology.

The problem of "Acute Abdomen" in gynecology. Modern approaches to diagnostics, differential diagnosis, treatment and prevention of urgent gynecological conditions. Ectopic pregnancy, ovarian apoplexy, rupture of the ovarian tumor capsule, torsion of the leg of the ovarian tumor, rupture of purulent tuboovarian tumor. Emergencies with uterine fibroids, eating disorders myomatous node. Traumatic injuries of the genitals. The problem is urgent gynecological care, basic principles and methods of emergency surgery conditions in gynecology. Preoperative preparation and postoperative gynecological management patients. Anesthesia during gynecological operations. Rehabilitation after gynecological interventions.

Topic 7 Anomalies of development of female genitals and disorders of puberty.Improper position and traumatic injuries of the female genitals. Gynecological diseases in children and adolescents.

Etiology and pathogenesis of abnormalities in the development of female genitals and genital disorders maturation. Anomalies in the development of the hymen and vulva. Defects in the development of external genitalia bodies. Malformations of the vagina. Anomalies of uterine development. Anomalies in the development of the fallopian tubes. Anomalies in ovarian development. Infantilism. Disorders of sexual development. Normal (types) position of the genitals. Wrong positions of the female genitals. Traumatic damage to the female genitals. Modern diagnostic methods, tactics and treatment. Anatomical and physiological features of the genitals of a girl in the process of formation reproductive system. Features of the survey of girls. Inflammatory sexually transmitted diseases organs in children and adolescents. Menstrual dysfunction. Tumors and injuries genitals.

Topic 8 Typical surgical interventions and endoscopic surgery in gynecology. Gynecological supervision patients, preparation of educational history of the disease.

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. Gynecological operations on the appendages and uterus. Small gynecological operations. Endoscopic surgery (laparoscopy, hysteroresectoscopy). Examination of a gynecological patient under the supervision of a teacher. Basics of counseling a gynecological patient under the supervision of a teacher. Medical ethics and deontology.

Topic 9 Infertile marriage. Family planning and methods of contraception.

Medical and social support for the problem of infertility in marriage. Etiopathogenetic factors development of infertility. Examination of a married couple in a barren marriage. Modern principles and methods of treatment of female infertility (hormonal, surgical, the latest reproductive technologies). Application of modern assisted reproductive technologies. Organization, structure and tasks family planning services. Family planning counseling: directions, benefits, process consultancy. Family planning for people living with HIV. Modern aspects contraception, general examination: COCs, vaginal ring, contraceptive patch, PTP, injectable, IUDs, barrier methods and spermicides. Classification, mechanism of action and efficiency of modern contraceptives. Methods of recognizing fertility, voluntary surgical sterilization, emergency contraception. Patient assessment. Necessary examinations are carried out in the planned procedure before deciding to use a particular method of contraception.

Topic 10 Protection of medical history. Final lesson from the module.

Educational history of the disease, based on the clinical supervision of patients with data design examination and additional research methods, in order to establish and justify the diagnosis and the appointment of a treatment regimen. The final lesson will include questions for the whole module "Diseases of the female reproductive system. Family planning", including: theoretical questions, questions to computer test control, and also working off practical skills in the simulation center (in the absence of quarantine at the patient's bedside).

5. Intended learning outcomes of the course

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.

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

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.

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.
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.
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.
To determine an appropriate approach, plan, and management of physiological pregnancy, physiological delivery, and postpartum period by making a reasonable decision according to existing algorithms and standard procedures.
To assess the general condition of a newborn child by making an informed decision according to existing algorithms and standard schemes and adhering to the relevant ethical and legal norms.
To determine the appropriate approach in emergency medical care case 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 under limited time conditions based on the principles of evidence-based medicine.
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.
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.
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.
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

Topic 1. Anatomy and physiology of the female genitalia. Methods of examination of gynecological patients.

pr.tr.1 "Anatomy and Physiology of the Female Genitals." (full-time course)

Clinical anatomy of female genitals. External genitalia. Internal sexual authorities. Circulation, lymph circulation and innervation of female genitals. Age features anatomy and physiology of the female genitalia. Neuroendocrine regulation of functions reproductive system. The study of this topic involves theoretical work in the school room, in the 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 the women's consultations (according to the agreement on cooperation between the medical institution and university).

pr.tr.2 "Methods of examination of gynecological patients. General symptoms of gynecological diseases." (full-time course)

Mastering the basic methods of examination: examination of the external genitalia, research with the help of mirrors, bimanual, rectovaginal examination. Methods of functional diagnostics. Radiation diagnostic methods: MRI, CT, MSG. Ultrasonic, instrumental methods of examination: probing of the uterine cavity, scraping uterine cavity, biopsy of endometrium, cervix, puncture of abdominal cavity through posterior arch. Endoscopic research methods: colposcopy, hysteroscopy, laparoscopy. Laboratory diagnosis: oncocytology, bacterioscopy, bacteriology, ELISA, PCR, pathomorphological examination. work with phantoms, training tables, gynecological tools). The study of this topic involves theoretical work in training room, simulation center, application of virtual simulation (viewing films with methods of examination in gynecology with further discussion. In the absence quarantine restrictions work in a women's clinic (learn to collect gynecological anamnesis, perform gynecological examination (examination in mirrors, bimanual, rectal), collection of material from the vagina, cervical canal and urethra for examination). Evaluate: the results of microscopy of urogenital smear, oncocytology research, colposcopy; results of bacteriological and other detection methods pathogens of inflammatory diseases of the female genital organs; ultrasound results research; results of tests of functional diagnostics.

Topic 2. Neuroendocrine regulation. Dysfunction of the reproductive system.

lect.1 "Dysfunction of the reproductive system. Amenorrhea. Abnormal uterine bleeding. Neuroendocrine syndromes in gynecology." (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 from the standpoint evidence-based medicine. Questions of gynecological endocrinology. Neuroendocrine syndromes in gynecology: premenstrual, menopausal, polycystic ovary syndrome, Sheehan's syndrome, hyperandrogenism, hyperprolactinemia. Clinic, modern methods diagnostics and principles of treatment from the standpoint of evidence-based medicine. Teaching conducted in the form of multimedia lectures (in the presence of quarantine - in the mode on-line).

pr.tr.3 "Neuroendocrine regulation. Dysfunction of the reproductive system." (full-time course)

Classification of disorders of the reproductive system. Amenorrhea: classification, diagnostics. Abnormal uterine bleeding. Clinic, modern diagnostic methods and principles of treatment. The problem of menstrual dysfunction at different ages. Modern methods of diagnosis and treatment. The study of this topic involves theoretical work in the study room, in the simulation center (work with phantoms, training tables, gynecological tools), the use of virtual simulation (watching movies about neuroendocrine regulation of the menstrual cycle) with the subsequent discussion. In the absence of quarantine restrictions, work in a women's clinic (according to the agreement on cooperation between the medical institution and the university).

pr.tr.4 "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).

Topic 3. Benign tumors of the female genitalia. Genital endometriosis. Gynecological aspects of breast disease.

lect.2 "Benign and malignant tumors of the female reproductive system. Background and precancerous diseases of the female genital organs." (full-time course)

Benign and malignant tumors of the female reproductive system. Background and precancerous diseases of the female genital organs. Clinic, modern diagnostic methods, tactics management of the patient from the standpoint of evidence-based medicine. Differential diagnosis. Teaching is carried out in the form of multimedia lectures (in the presence of quarantine - in on-line mode).

pr.tr.5 "Benign tumors of the female genitalia. Genital endometriosis." (full-time course)

Benign tumors and tumor-like diseases of the female genitalia. Concept cysts and ovarian tumors. Bartholin's cyst. Benign ovarian tumors: epithelial, genital stroma tumors, lipid-cell tumors, germinogenic tumors. Tumor-like formations of the ovaries. Benign tumors of the uterus. Clinic, modern methods of diagnosis, treatment from the standpoint of evidence-based medicine. Problem endometriosis. Etiopathogenetic aspects of endometriosis. Classification. Clinic. Study this topic involves theoretical work in the classroom, simulation center (work with gynecological tools), the use of virtual simulation (viewing) films with further discussion). Work in a women's clinic with the development of skills consultative reception of gynecological patients, work in the ultrasound room diagnostics, be able to distinguish between tumor-like ovarian diseases by classification O-RADS, work in a small operating room with the development of diagnostic scraping skills uterine cavity, endometrial biopsy, hysteroresectoscopy, presence in the operating room time of operative treatment of thematic patients with endometriosis with application laparoscopic equipment (according to the agreement on cooperation between the medical institution and university, provided there are no quarantine restrictions). Master diagnostic methods, treatment and prevention of endometriosis. Get acquainted with medical methods rehabilitation of women with endometriosis.

pr.tr.6 "Gynecological aspects of breast disease." (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 the 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.

Topic 4. Background and precancerous diseases of the female genitalia. Malignant neoplasms genitals. Trophoblastic diseases.

pr.tr.7 "Background and precancerous diseases of the female genitalia." (full-time course)

Background and precancerous diseases of the external genitalia. Background and precancerous cervical disease: classification. Hyperplastic processes of the endometrium: etiology, pathogenesis, classification, modern diagnostic methods, management tactics and principles of treatment. Prevention of background and precancerous diseases of the female genitalia. Study of this topic involves theoretical work in the classroom, in the simulation center (work with gynecological tools), the use of virtual simulation (watching movies with further discussion). Work in a women's clinic with the development of counseling skills reception of gynecological patients, work with a colposcope, to master cytological skills examination of the cervix, collection of material for biopsy (according to the Agreement between the University and clinical institution, provided there are no quarantine restrictions).

pr.tr.8 "Malignant neoplasms of the genitals. Trophoblastic diseases." (full-time course)

Malignant neoplasms of the external female genitalia (vulvar cancer). Cervical cancer. Cancer the body of the uterus. Uterine sarcoma. Ovarian cancer. Uterine cancer. Classification, clinic, diagnosis, management tactics and principles of treatment. Trophoblastic diseases. Study of this topic involves theoretical work in the classroom, in the simulation center (work with gynecological tools), the use of virtual simulation (watching movies with further discussion). Work in a women's clinic with the development of counseling skills reception of gynecological patients, work in the office of ultrasound diagnostics, be able to distinguish tumor-like ovarian diseases according to the O-RADS classification, work in a small operating room mastering the skills of diagnostic scraping of the uterine cavity, endometrial biopsy, hysteroresectoscopy (according to the Agreement between the University and the clinical institution, provided no quarantine restrictions). Mastering modern methods of early diagnosis, tactics management of patients, principles of treatment and prevention of malignant neoplasms in women genitals, basics of rehabilitation of patients.

Topic 5. Inflammatory diseases of the female genital organs.

lect.3 "Inflammatory diseases of the female genitals. Infertile marriage. Family planning." (full-time course)

Inflammatory diseases of the female genital organs. Infertile marriage. Family planning. Concept vaginal microbiocinosis. Etiology, pathogenesis, classification of inflammatory diseases in women genitals. Inflammatory diseases of nonspecific (vulvitis, bartholinitis, vaginitis, endocervicitis, endometritis, adnexitis, parametritis, pelvioperitonitis) and specific etiology. Tuberculosis female genitals. Modern approaches to diagnosis and treatment. Diseases that sexually transmitted (trichomoniasis, gonorrhea, candidiasis, viral lesions, urea-, mycoplasmosis, chlamydia). Diagnosis, treatment and prevention of transmitted diseases sexually.

pr.tr.9 "Inflammatory diseases of the female genitalia." (full-time course)

The concept of vaginal microbiocinosis. Etiology, pathogenesis, classification of inflammatory diseases in women genitals. Inflammatory diseases of nonspecific (vulvitis, bartholinitis, vaginitis, endocervicitis, endometritis, adnexitis, parametritis, pelvioperitonitis) and specific etiology. Modern approaches to diagnosis and treatment. The study of this topic involves theoretical work in the school room, in the simulation center (work with gynecological tools), application virtual simulation (watching movies with further discussion). Work in the women's consultations with mastering of skills of consultative reception of gynecological patients, collecting gynecological and reproductive history, work in the office of ultrasound diagnostics, gynecological department, work in a small operating room with the teacher's presence at operations on removal of tuboovarian abscess (according to the Agreement between the University and the clinical institution, for conditions of absence of quarantine restrictions).

pr.tr.10 "Inflammatory diseases of the female genitalia." (full-time course)

Sexually transmitted diseases (trichomoniasis, gonorrhea, candidiasis, viral lesions, urea, mycoplasmosis, chlamydia). Tuberculosis of the female genitals. Modern approaches to diagnosis and treatment. Diagnosis, treatment and prevention of diseases that sexually transmitted. Master the methods of modern diagnosis and treatment of acute and chronic inflammatory processes of the female genitals, management of patients with purulent tuboovarian tumor. Indications for surgical treatment. Examine the peculiarities of the flow inflammatory diseases of the female genitals at different ages, to master the tactics of management and further rehabilitation of women who have undergone inflammatory processes. The study of this topic involves theoretical work in the classroom, in the simulation center (work with gynecological tools), the use of virtual simulation (watching movies with subsequent discussion). Work in a women's clinic with the development of skills of counseling gynecological patients, collection of gynecological and reproductive anamnesis, office work ultrasound diagnostics, gynecological department, work in a small operating room with development skills of puncture through the posterior arch, laparoscopic operating room with a teacher presence at operations on removal of a tuboovarian abscess (according to the Agreement between University and clinical institution, provided there are no quarantine restrictions).

Topic 6. Emergencies in gynecology.

lect.4. "Acute Abdomen" in gynecology.

The problem of "Acute Abdomen" in gynecology. Modern approaches to diagnostics, differential diagnosis, treatment from the standpoint of evidence-based medicine and prevention emergencies in gynecology. Ectopic pregnancy, ovarian apoplexy, rupture ovarian tumor capsules, torsion of the ovarian tumor leg, purulent rupture tuboovarian tumor.

pr.tr.11 "Emergencies in gynecology." (full-time course)

The problem of "Acute Abdomen" in gynecology. Modern approaches to diagnostics, differential diagnosis, treatment from the standpoint of evidence-based medicine and prevention emergencies in gynecology. Ectopic pregnancy, ovarian apoplexy, rupture ovarian tumor capsules, torsion of the ovarian tumor leg, purulent rupture tuboovarian tumor. The study of this topic involves theoretical work in training room, simulation center (work with gynecological tools), application of virtual simulation (watching movies with further discussion). Except moreover, when studying this topic, role-playing games are provided, in the absence of quarantine restrictions work at the patient's bedside in specialized departments of the medical institution (according to the agreement on cooperation between the medical institution and the university). Drawing up a treatment plan for the patient.

pr.tr.12 "Emergencies in gynecology." (full-time course)

Emergencies with uterine fibroids, malnutrition of the myoma. Traumatic genital damage. The problem of emergency gynecological care, the main principles and methods of surgical interventions in emergencies in gynecology. Acquaintance with features of preoperative preparation and postoperative management of gynecological patients. Anesthesia during gynecological operations. Rehabilitation after gynecological interventions. The study of this topic involves theoretical work in classroom, the use of virtual simulation (watching movies from emergencies in gynecology) with further discussion. In addition, when study of this topic in the absence of quarantine restrictions involves work around beds of the patient in profile departments of medical institution (according to the agreement on cooperation between the medical institution and the university). Interpretation of results laboratory and instrumental methods of examination, treatment plan.

Topic 7. Anomalies of development of female genitals and disorders of puberty.Improper position and traumatic injuries of the female genitals. Gynecological diseases in children and adolescents.

pr.tr.13 "Anomalies of development of female genitals and disorders of puberty. Improper position and traumatic injuries to the female genitals." (full-time course)

Etiology and pathogenesis of abnormalities in the development of female genitals and genital disorders maturation. Anomalies in the development of the hymen and vulva. Defects in the development of external genitalia bodies. Malformations of the vagina. Anomalies of uterine development. Anomalies in the development of the fallopian tubes. Anomalies in ovarian development. Infantilism. Disorders of sexual development. Normal (types) position of the genitals. Wrong positions of the female genitals. Traumatic damage to the female genitals. Modern diagnostic methods, tactics and treatment. The study of this topic involves theoretical work in the classroom, in simulation center (work with a phantom, gynecological tools), application virtual simulation (watching movies with further discussion). Work in the women's consultations with mastering of skills of consultative reception of gynecological patients, collecting gynecological and reproductive history, examination in mirrors, bimanual palpation (for no quarantine restrictions). Acquaintance with features of vaginal surgery at genital prolapse (presence in the operating room with the teacher).

pr.tr.14 "Gynecological diseases in children and adolescents." (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 the children's gynecologist, collecting gynecological history (according to the agreement on cooperation between the medical institution and university).

Topic 8. Typical surgical interventions and endoscopic surgery in gynecology. Gynecological supervision patients, preparation of educational history of the disease.

pr.tr.15 "Typical Surgical Interventions and Endoscopic Surgery in Gynecology." (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. this topic involves theoretical work in the classroom, simulation center (work with gynecological tools), the use of virtual simulation (watching movies with recordings of surgical interventions with further discussion). By no quarantine restrictions work in the gynecology 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).

pr.tr.16 "Curation of gynecological patients, preparation of educational history of the disease." (full-time course)

Examination of a gynecological patient under the supervision of a teacher. Basics of counseling gynecological patient under the supervision of a teacher. Medical ethics and deontology. Study this topic involves theoretical work in the classroom, work at the patient's bedside. Work with medical documentation: interpretation of the obtained laboratory data research, endoscopic examination, X-ray and ultrasound examination of the patient in the departments of the medical institution (according to the agreement on cooperation between the medical institution and the university in the absence of quarantine restrictions).

Topic 9. Infertile marriage. Family planning and methods of contraception.

lect. 5. Infertile marriage. Family planning and methods of contraception.

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. 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. Classification, mechanism of action and efficiency of modern contraceptives from the standpoint of evidence-based medicine. pr.tr.17 "Infertile marriage." (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.18 "Family planning and methods of contraception." (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. Classification, mechanism of action and efficiency of modern contraceptives from the standpoint of evidence-based medicine. The study of this topic involves theoretical work in the classroom, simulation center (work with gynecological tools), the use of virtual simulation (watching movies by means contraception 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). Introduction to modern methods contraception: COCs, vaginal ring, contraceptive patch, PTP, injectable, IUD, barrier methods and spermicides. Introduction to fertility recognition methods, 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 10. Protection of medical history. Final lesson from the module.

pr.tr.19 "Protecting medical history." (full-time course)

Educational history of the disease, based on the clinical supervision of patients with registration survey data and additional research methods, in order to establish and substantiation of the diagnosis and appointment of the treatment scheme.

pr.tr.20 "Final lesson from the module." (full-time course)

The final lesson will include theoretical questions, computer questions test control, involving classes in the classroom, as well as practice of practical skills in the simulation center (in the absence of quarantine restrictions at the patient's bedside).

LA1	Writing a medical history
LA2	Preparing for Krok 2
LA3	Self-study
LA4	Interpretation of laboratory (clinical analysis of blood, urine, biochemical analysis blood, hormonal research, etc.) and instrumental (colposcopy, hysteroscopy, mammography, ultrasound, CT, radiography, etc.) methods examination
LA5	Preparation for practical classes

7.2 Learning activities

LA6	Analysis of clinical cases
LA7	Practical work with the patient in the specialized departments of the hospital
LA8	E-learning in systems (Zoom, MIX.sumdu.edu.ua)
LA9	Exam preparation
LA10	Watching educational films
LA11	Individual research project (student research, article, these, etc.)
LA12	Work with textbooks and relevant information sources
LA13	Practice of practical skills in the simulation center

8. Teaching methods

Course involves learning through:

TM1	Case-based learning (CBL). Training based on the analysis of a clinical case, situations
TM2	Team-based learning (TBL). Team-oriented training
TM3	Research-based learning (RBL). Learning through research
TM4	Brainstorming
TM5	Interactive lectures
TM6	Role Playing game
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, scientificvalues and achievements of society based on understanding thehistory 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)	$170 \le RD \le 200$

Above the average standard but with minor errors	4 (Good)	$140 \le \text{RD} < 169$
Fair but with significant shortcomings	3 (Satisfactory)	$120 \le RD < 139$
Fail – some more work required before the credit can be awarded	2 (Fail)	$0 \le RD < 119$

9.2 Formative assessment

FA1	Peer assessment
FA2	Protection of medical history
FA3	Testing
FA4	Defense of an individual research project (speech at a conference, competition of scientific works)
FA5	Teacher's instructions in the process of performing practical tasks
FA6	Interviews and oral comments of the teacher on his results
FA7	Checking and evaluating written assignments
FA8	Solving clinical cases

9.3 Summative assessment

SA1	Evaluation of written works, surveys, solving a clinical case
SA2	Protection of medical history
SA3	Testing
SA4	Final control: diff. test
SA5	Protection of an individual research project (incentive activities, additional points)

Form of assessment:

10 semester		200 scores
SA1. Evalua	SA1. Evaluation of written works, surveys, solving a clinical case	
		100
SA2. Protec	SA2. Protection of medical history	
		10
SA3. Testing		10
		10
SA4. Final control: diff. test		80
	Answer to theoretical questions (3x15)	45
	Execution of a practical task	15
	Providing emergency care	20

10 semester		200 scores
SA1. Evaluation of written works, surveys, solving a clinical case		100
	In the case of quarantine restrictions on the evaluation of written works, surveys, solving clinical cases are conducted in remote mode using the platform Mix.sumdu.edu.ua, Zoom, Google meet	100
SA2. Protection of medical history		10
	In case of quarantine restrictions protection of medical history is carried out in the remote mode with application platform Mix.sumdu.edu.ua, Zoom, Google meet.	10
SA3. Testing		10
	In the case of quarantine restrictions, testing is performed in remote mode using the platform Mix.sumdu.edu.ua.	10
SA4. Final control: diff. test		80
	У випадку карантинних обмежень диф. залік 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 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 to the arithmetic mean and divide by 5. For writing a medical history 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, the history of the student can get a maximum of 10 points, the minimum required score of 6. For diagnostic testing the student receives a maximum of 10 points. The minimum number of points you must get a student - 6 points. The maximum number of points for the current educational activity student - 120. The student is admitted to the diff. offset subject to the requirements of the training program and if for the current educational activity he scored at least 72 points: 60 points during practical classes, 6 points for medical history and 6 points for testing. Differentiated offset is performed according to the schedule at the end of the cycle. Tickets contain 3 theoretical questions on various topics and cover all sections academic discipline (15 points each), 1 practical task (15 points) and questions emergency care (20 points). Diff. 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 implementation of an individual research project (defense of student science work 12 points, speech at the conference 5 points, poster presentation at the conference 4 points, thesis reports 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
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MTS2	Library funds, archive of radiographs, computer tomograms, ultrasound, results of laboratory methods of inspection
MTS3	Computers, computer systems and networks
MTS4	The simulation center, which is equipped with a phantom of the female pelvis, training model for practicing practical skills: introduction and removal of intrauterine contraceptives, introduction and removal vaginal ring, models of individual organs: the uterus to work methods of taking material for bacterioscopic examination, set tools: Cusco mirror, Simpson mirror with retractor, set brushes, ball forceps, uterine probe, slides
MTS5	Regional Clinical Perinatal Center, Clinical maternity hospital of the Blessed Virgin Mary ", MedSoyuz Medical Center, city central clinical hospital
MTS6	Multimedia, video and sound reproduction, projection equipment (video cameras, projectors, screens, laptops)
MTS7	Software (to support distance learning, Online surveys, virtual labs, virtual patients, for creation of computer graphics, modeling, etc., etc.)
MTS8	Medical equipment (colposcope, simulator for IUD insertion, set for gynecological examination, cervical brushes, slides, apparatus Ultrasound, digital mammogram, hysteroscope, laparoscopic stand, etc.)

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. Ventskivskyi etc. ; edit. by: V.I. Gryshchenko, M.O. Shcherbina. — 2-nd edition. — K. : AUS Medicine Publishing, 2018. — 392 p
2	Obstetrics/Gynecology: Lecture Notes / Editors W.G. Cvetnic, E. Pino. — New York : Kaplan, 2019. — 291 p.
3	Obstetrics and gynecology: in two volumes: textbook. Vol.2 : Gynecology / V. I. Gryshchenko, M. O. Shcherbina, B. M. Ventskivskyi etc. ; edit. by: V.I. Gryshchenko, M.O. Shcherbina. — 2-nd edition. — K. : AUS Medicine Publishing, 2018. — 352 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	Te Linde's Operative Gynecology. Twelft edition. Victoria L. Handa, Linda Van Li. Hardcover edition. New York. 2019. 339 p.
Supplemental Reading	
1	Hacker and Moore39;s Essentials of Obstetrics and Gynecology [Tekct] / 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 ofstudy / В. І. Бойко, М. Л. Кузьоменська, С. А. Сміян еtc. — 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 c.
5	Obstetrics & gynecology [Tekct] : texbook for students of institutions of higher medical education of the III-IV levels of acc.(MPHU). V.2 : Gynecology / ed. by V.I. Gryshchenko in two volumes K. : AUS Medicine publishing, 2014.