GENERAL INFORMATION		
Course name	**Clinical Practice 5 - Gynecology and Pediatrics**	
Course director	**Prof. Siniša Šijanović, MD, PhD**	
Assistants	Assoc. Prof. Zlatko Topolovec, MD, PhD Asst. Prof. Andrijana Müller, MD, PhD Asst. Prof. Domagoj Vidosavljević, MD, PhD Kristina Abičić Žuljević, MD	
Study program	**Integrated undergraduate and graduate university study program Medical Studies in German**	
Course status	Mandatory	
Year of study, semester	5th year, 10th semester	
Credits allocated and form of instruction	ECTS student workload	**2**
	Number of teaching hours (L+S+E)	**150** (0+0+150)

COURSE DESCRIPTION

Course objectives

General gynecological issues, urogynecology and gynecologic oncology, physiology and pathology of pregnancy and fetus, neonatology. Problems of the female reproductive system, acquiring knowledge of basic principles of pediatrics and treatment of pediatric disorders. Students will be familiar with the epidemiology, pathophysiology and clinical manifestations of pediatric diseases, as well as diagnostic and therapeutic procedures regarding certain diseases. A multidisciplinary approach to diseases, evidence-based medicine and problem-oriented pediatrics will be emphasized.

Course requirements

There are no specific requirements for this course except those defined in the study program curriculum.

Learning outcomes at the Programme level

1.1., 1.2., 2.1., 2.2., 2.3., 3.1., 4.2.

Expected learning outcomes *(5-10 learning outcomes)*

Knowledge

1. Describe the normal function of a menstrual cycle with respect to the four phases of a woman's life (prepuberty and puberty, reproductive years, perimenopause and postmenopause, seniority)
2. Describe the course of pregnancy, changes and mechanisms during normal (physiological) pregnancy, childbirth, postpartum period and basic developments at neonatal age, and explain diagnostic tools and applied modern diagnostic and monitoring methods during pregnancy, childbirth and postpartum period
3. Describe and explain the course, changes, mechanisms, symptoms, and applied diagnostic and therapeutic methods used during a pathological (abnormal) pregnancy, childbirth and postpartum period
4. Define the originating mechanisms of the most common gynecological disorders and explain the diagnostic tools and applied modern diagnostic and therapeutic methods
5. Define the key clinical factors of human reproduction and medically assisted reproduction, and explain modern means and methods of reproduction
6. Interpret the etiopathogenetic mechanisms for the occurrence of the most common gynecological disorders and explain the diagnostic tools and applied modern diagnostic and therapeutic methods

1. Define basic factors related to children of different ages (infant, child, adolescent) as an object of interest in pediatrics and explain the holistic approach to pediatrics which

includes measures for the prevention and treatment of diseases, as well as the rehabilitation of sick children
2. Understand vital statistics and basic aspects of the organization of health care for mothers and children, explain the implementation of newborn screening and vaccination, and emphasize the importance of other measures for prevention and preservation of children's health
3. Emphasize the need and explain the methods of taking care of and monitoring the normal growth and development of children, including familiarization with their proper nutrition in accordance with the appropriate age of a child
4. Understand, define and classify the casuistry of special pediatrics according to the functions and diseases of the main organ systems

Skills

1. Keep and update the medical records of pregnant women, new mothers and gynecological patients
2. Record and interpret cardiotocographic findings
3. Interpret the fetal acid-base status
4. Understand the management of labor in cephalic and breech presentation
5. Demonstrate and apply the practical knowledge necessary to perform a gynecologic and obstetrical examination on a model of a pregnant and non-pregnant woman (pelvis and abdomen anatomy models), demonstrate the management of vaginal delivery on the model and the management of the third and fourth stage of labor
6. Take a cervical-vaginal swab (Pap smear) on a model and interpret the cytological findings
7. Understand the skills of taking a pediatric heteroanamnesis and the skills of physical examination of children, as well as its specificities depending on the age of a child
8. Understand the methods and ways of assessing children's growth and psychomotor development and recognize children who deviate from normal findings and expected values
9. Understand the basic procedures, recommendations and advice on the nutrition of both healthy and sick children and distinguish them regarding the age of a child
10. Understand basic procedures of cardiopulmonary resuscitation for newborns, infants, children and school children, as well as general procedures in cases of acute poisoning

Course content

Anatomy of the female reproductive organs; Genital sex differentiation; Fertilization, nidation and egg transport; Menstrual cycle; Infertility in marriage; Menstrual disorders; Postmenopause; Sexually transmitted diseases; Ectopic pregnancy; Methods of assisted reproduction; Hormones in human reproduction; Physiological changes in the reproductive organs during the cycle; Acute and chronic inflammation of the female reproductive system; Endoscopy in gynecology; Endometriosis; Menstrual disorders; Principles of treatment of infertility in marriage; Family planning; Pregnancy diagnosis; Physiological changes in pregnancy; Mechanism of childbirth. Contractions, child, birth canal; Fetal monitoring during pregnancy and childbirth; Postpartum; Premature birth; Functions of the placenta; Development of the placenta; Threatened habitual abortions; Fetal development; Fetal hypotrophy SIA; Physiology and pathology of the amniotic fluid; Hemorrhage in advanced pregnancy; Placenta praevia. Placental abruption. Diabetes and pregnancy. Gestational diabetes; Hypertension during pregnancy; Preeclampsia. Eclampsia. Types of childbirth; Deflexed presentations. Abdomen. Oblique lie. Transverse position; Intraamniotic infection; Trophoblastic disease; Prenatal diagnosis of fetal abnormalities; Premature birth and electromyography; Fetal monitoring during childbirth; Cervical intraepithelial neoplasia and the sampling methods; Uterine myomas and sarcomas; Endometrial cancer; Benign neoplasms of the ovaries and treatment stage; Malignant ovarian neoplasms; Vulvar and vaginal neoplasms; Cervical cancer; Tubal cancer; Trophoblastic disease; Treatment of patients with vulvar and vaginal cancer, CIN, HPV infection. Prevention methods. Early detection of endometrial cancer; Diagnosis and treatment of breast cancer; Diagnosis and treatment of malignant tubal

and ovarian neoplasms; Administration of chemotherapy; Radiotherapy in gynecologic cancers; Acute abdomen in gynecology; Urogynecology; Introduction to clinical cytology.
The history of the development of gynecologic cytology in the world and in Croatia. Implementation of cytology in gynecology and obstetrics. Histology and cytomorphology of a normal genital tract. Cytohormonal status.
Conventional PAP smear: swabbing, treatment of samples and the basic principles of cytologic evaluation.
Cytology of premalignant and malignant cervical lesions. Classification of cervical cytological findings. Value of cytological diagnostic in differential diagnosis; Comparison of cytological and histopathological findings.
Prevention of cervical cancer; primary and secondary, opportunistic and organized screening. New techniques in cytology and other screening methods; Cytology of the vulva, vagina, endometrium and ovaries. Implementation during pregnancy; G.N. Papanicolaou – Life and Work. Epidemiology and risk factors for the development of CIN and cervical cancer; Preparation of cytological preparations and the Papanicolaou stain. Setting-up a cytology laboratory; Cervical cancer prevention program.
Causes of urinary tract infection in the Pap smear; Cytology of endometrium; Refresher course in gynecological pathology; Inside the IVF laboratory; Gynecological and obstetric anesthesiology; Examining the newborn, resuscitation
Pediatrics course includes propaedeutics of pediatrics, clinical pediatrics, social and preventive pediatrics and pediatric rehabilitation. Students will be familiarized with the etiopathogenesis and specificities in the diagnostics of childhood diseases, with the prevention of childhood diseases, and they will be trained for the treatment and rehabilitation of sick children.
Clinical pediatrics: epidemiology, symptomatology, prophylaxis, diagnostics and therapy, as well as prognosis of the most common acute and chronic pathological conditions in childhood. The main thematic units are emergency and life-threatening conditions and diseases in children, heredity, newborn pathology and constitution, accidents and poisoning of children, congenital anomalies and inborn errors of metabolism, acute and chronic nutritional disorders of infants and children, avitaminosis and hypovitaminosis, acute and chronic diseases of the respiratory system, immunological and hematological diseases, heart diseases and rheumatic fever, tuberculosis in childhood, pathology of growth and the most common endocrine disorders in children, diseases of the digestive and urinary tract and neurological disorders in children.

Form of instruction	☐ lectures ☐ seminars and workshops ☒ exercises ☐ distance learning ☐ field course	☐ individual assignments ☐ multimedia and Internet ☐ laboratory ☐ mentoring activities ☐ other

Student obligations

Come to class prepared by studying the recommended literature for each unit and actively participate in all forms of instruction. The student must participate in at least 70% of classes to pass the course.

Monitoring student learning

Attendance	x	Active participation	x	Seminar paper		Experimental work	
Written exam	x	Oral exam	x	Essay		Research	
Project		Continuous assessment		Paper		Practical work	x
Portfolio							

Assessment and evaluation of students during class and on the final exam

Students' performance will be evaluated during class and on the final exam. Students are evaluated numerically and descriptively (insufficient (1), sufficient (2), good (3), very good (4), excellent (5)). During classes, a student can earn a maximum of 100 points. Students can earn a maximum of 20 points during classes through different types of activities. On the final exam,

students can earn a maximum of 80 points. The final grade represents the sum of the points earned during classes and on the final exam.
Mandatory reading
1. Holzgreve W., Jonat W., Shneider KTM, Weiss JM, Diedrich K. Gynäkologie und Geburtshilfe. Springer-Lehrbuch. 2. Gortner L., Meyer S., Sitzmann FC. Pädiatrie - Duale Reihe. Thieme: 2012
Additional reading
1. Danforth's Obstetrics and Gynecology. Medicine & Health Science Books.
The number of copies of mandatory reading in proportion to the number of students currently taking this course

Title	*Number of copies*	*Number of students*
Holzgreve W., Jonat W., Shneider KTM, Weiss JM, Diedrich K. Gynäkologie und Geburtshilfe. Springer-Lehrbuch.	*20*	*60*

Quality monitoring methods ensuring the acquisition of knowledge upon completion, skills and competences
The quality of course performance is monitored through an anonymous student survey on the quality of the organization and conduction of classes, the course content and the work of professors. The usefulness of the lectures from the students' perspective, the curriculum content, the professor preparedness, the clarity of the presentation, the amount of new content and the quality of the presentation are evaluated. The curriculum and its execution are administratively compared. The participation of students in lectures and exercises, as well as the excuses for missing classes, are controlled and analyzed.