

**DESCRIPTION OF COURSE UNIT FOR DOCTORAL STUDIES
AT VILNIUS UNIVERSITY
(Interdisciplinary Course)**

Scientific Area/eas, Field/ds of Science	Medicine and Health Sciences (M 000): Medicine (M 001), Dentistry (M 002), Public Health (M 004) Natural sciences (N 000): Biology (N 010); Biochemistry (N 004); Biophysics (N 011) Social sciences (S 000): Political sciences (S 002); Sociology (S 005); Psychology (S 006)			
Faculty, Institute, Department/Clinic	Faculty of Medicine Institute of Clinical Medicine Clinic of Obstetrics and Gynaecology			
Course unit title (ECTS credits, hours)	Maternal and child health - modern trends 8 credits (216 hours)			
Study method	Lectures	Seminars	Consultations	Self-study
Number of ECTS credits	1	1	1	1
Method of the assessment (in 10 point system)	Presentation and assessment of the thesis on maternal and child health. The topic of the thesis is defined with one of the consulting lecturers. The doctoral student presents the thesis during the meeting of the Clinic of Obstetrics and Gynaecology or the clinical conference of the Center for Obstetrics and Gynaecology of Vilnius University Hospital. The doctoral student must analyze, review, and present the latest scientific publications related to the target topic or provide an analysis of a clinical case. The report is evaluated on a 10-point scale: 10 - excellent; 9- very good; 8- well; 7 - on average; 6 - satisfactory; 5 - weakly; 4 - 1 point - unsatisfactory. The criteria to be assessed - content of the report (idea/hypothesis, clearly stated purpose, explanation of the literature search strategy, provided analysis of the clinical case, clarity of results and conclusions), technical / visual presentation (clarity of tables and figures, compliance with literature citation requirements, the text without grammatical and style errors, presentation visually appealing), presentation of the report (ability to participate in discussion, question management, oratory skills).			
PURPOSE OF THE COURSE UNIT				
To give knowledge about the physiological and pathological changes of a woman of reproductive age, the care for a healthy newborn; to give the basic knowledge of perinatal medicine, the most common diseases of pregnant women, the pathology of pregnancy, the health problems of the newborn, the most common diseases of a woman's reproductive age and their prevention. To introduce the methods of family planning and contraception and the principles of diagnosis and treatment of infertility, the possibilities of assisted reproduction, the principles of women's health screening programs in Lithuania, the specialized assistance provided to female victims of sexual violence.				
THE MAIN TOPICS OF COURSE UNIT				

Anatomy and physiology of the female reproductive system. Structure of the ovaries, folliculogenesis, ovulation. Topography, structure and function of the fallopian tubes, uterus, vagina. Cyclic changes of the endometrium. The female external genitalia. Female sex hormones: biosynthesis, metabolism, action. Endocrine regulation of the menstrual cycle.

Basics of perinatology and modern trends. The role of the family in the provision of perinatology services. Perinatology as a field of science. Organization of perinatal care in Lithuania. Risk factors during pregnancy, high and low risk pregnancy. Newborn and family-friendly hospital initiatives.

Physiological changes during pregnancy. Changes in vaginal flora during pregnancy, vaginal candidiasis, bacterial vaginosis.

Perinatal periods. Effects of environment and parental health on fetal development. Principles of antenatal care for pregnant women. Vaccination during pregnancy. Nutrition and hygiene of pregnant women. Pregnancy Crisis Care for women and partners with unplanned pregnancy, baby loss and post abortion.

Fetal well-being assessment during pregnancy. Ultrasound examination during pregnancy. Indications for ultrasound examination. Prenatal diagnosis: fetal anomalies, genetic syndromes, fetal tumors. Possibilities, indications, most common procedures of fetal surgery.

Childbirth. Childbirth physiology – the stages of labour and birth, the care during childbirth. Postpartum period - physiological changes. Pathology of the postpartum period - lactostasis, endometritis, mastitis, sepsis. Pelvic floor rehabilitation after childbirth. Childbirth at home, its legal regulation. Ethical and legal issues in perinatology. The importance of subjective childbirth experiences for the family. Definition of the obstetric violence. Breastfeeding. Drugs and lactation.

Rh incompatibility during pregnancy, prevention of isoimmunization.

The most common diseases of pregnant women. Hypertensive disorders: maternal and fetal complications, pregnancy management. Bleeding during pregnancy. Gestational diabetes. Intrahepatic cholestasis in pregnant women. Anemia in pregnancy. General diseases and pregnancy.

Critical conditions in obstetrics: bleeding, eclampsia, HELLP syndrome, pulmonary embolism and deep venous thrombosis, sepsis.

Postpartum assessment of the newborn. Factors influencing the condition and adaptation of the newborn. Care of the newborn, vaccination, follow up. Breastfeeding. Transitional conditions of the newborn. Neonatal jaundice, differential diagnosis, treatment. Neonatal asphyxia, perinatal CNS injury, convulsions. Resuscitation of the newborn. Neonatal sepsis. Neonatal TORCH infections, diagnosis, treatment options, prevention. Premature infant, its physiology, nursing, nutrition, stabilization, survival. New technologies in the diagnosis and treatment of neonatal diseases.

Peculiarities and health of women of reproductive age. Menstrual disorders. Abnormal uterine bleeding. Premenstrual syndrome. Polycystic ovary syndrome. Ectopic pregnancy. Pelvic inflammatory disease. Sexually transmitted diseases. Chronic abdominal pain and its differential diagnosis.

Cervical diseases. Precancerous cervical changes. Importance of testing. Cervical Cancer Prevention Program.

Uterine fibroids: etiopathogenesis, clinic, treatment. Endometriosis: etiopathogenesis, clinic, treatment. Ovarian tumors. Conservative and surgical treatment of urinary incontinence.

Cosmetic, functional and reconstructive gynecology - modern issues.

Sexual violence.

Breast disorders. Breast cancer. Breast Cancer Prevention Program.

Family planning. Infertility. Goals and methods of family planning, their reliability, indications, contraindications. Contraception.

Evaluation of the infertile family. Causes of infertility. Infertility in women and men. Patient management. Treatment of infertility. Law on Assisted Reproduction in Lithuania. Surrogacy, its types, legal regulation. Changes and health problems in perimenopause and postmenopause. Quality of life during menopause. Menopausal hormone therapy.

RECOMMENDED LITERATURE SOURCES

1. Akušerijos ir neonatologijos diagnostikos ir gydymo metodikos 2019-2020. <https://sam.lrv.lt/lt/veiklos-sritys/programos-ir-projektai/sveicarijos-paramos-programa/akuserijos-ir-neonatologijos-diagnostikos-ir-gydymo-metodikos>.
2. Williams Obstetrics. F. G. Cunningham, K. J. Leveno, J.S. Dashe, B. L. Hoffman, C. Y. Spong, B. M. Casey. 26th ed. Mc Grow Hill Education 2022. The McGraw-Hill Companies; <https://accessmedicine.mhmedical.com/book.aspx?bookID=2977>
3. Williams Gynecology. Hoffman BL, Schorge JO, Halvorson LM, Hamid CA, Corton MM, Schaffer JI. 4e. McGraw Hill, 2020. <https://accessmedicine.mhmedical.com/content.aspx?bookid=2658§ionid=217599855>.
4. Menopauzė. Menopauzinė hormonų terapija (MHT) klinikinės rekomendacijos, 2021. https://lagd.lt/data/public/uploads/2021/06/d1_menopauze.pdf
5. K. Jarienė, R. Nadišauskienė. Seksualinis smurtas. Profesionalaus elgesio taktika. Kaunas, UAB "Vitae Litera" 2019. ISBN:9786094543630
6. Nevaisingumo diagnostikos ir gydymo metodika (2019). https://sam.lrv.lt/uploads/sam/documents/files/Nevaisingumo%20metodika%20SAM_2019-07-22.pdf
7. Kontracepcijos metodika 2016. https://sam.lrv.lt/uploads/sam/documents/files/Veiklos_sritys/Kontracepcijos_metodika_2016-11-22.pdf
8. Nassar, Anwar H.; Visser, Gerard H.A.; Nicholson, Wanda Kay; Ramašauskaitė, Diana; Kim, Yoon Ha; Barnea, Eytan R. FIGO statement: vaccination in pregnancy // International journal of gynecology and obstetrics: Special section: From the FIGO Safe Motherhood & Newborn Health Committee. Hoboken : Wiley. ISSN 0020-7292. eISSN 1879-3479. 2021, vol. 152, iss. 2, p. 139-143. DOI: 10.1002/IJGO.13456.
9. Romeikienė KE, Bartkevičienė D. Pelvic-Floor Dysfunction Prevention in Prepartum and Postpartum Periods. Medicina (Kaunas). 2021 Apr 16;57(4):387. doi: 10.3390/medicina57040387.
10. Myra H. Wyckoff et al. Neonatal life support: 2020 international consensus on cardiopulmonary resuscitation and emergency cardiovascular care science with treatment recommendations.
11. Puopolo KM, Benitz WE, Zaoutis TE; Committee on fetus and newborn; Committee on infectious diseases. Management of Neonates Born at ≥ 35 0/7 Weeks' Gestation With Suspected or Proven Early-Onset Bacterial Sepsis. Pediatrics. 2018 Dec;142(6):e20182894.
12. Puopolo KM, Benitz WE, Zaoutis TE; Committee On Fetus And Newborn; Committee On Infectious Diseases. Management of Neonates Born at ≤ 34 6/7 Weeks' Gestation With Suspected or Proven Early-Onset Bacterial Sepsis. Pediatrics. 2018 Dec;142(6):e20182896.
13. Yvonne Wu. https://www.uptodate.com/contents/clinical-features-diagnosis-and-treatment-of-neonatal-encephalopathy_2020.

14. Ramašauskaitė, Diana. Management of pregnancy and delivery in prenatally diagnosed congenital anomalies // Congenital anomalies: from the embryo to the neonate / edited by: Stefania Tudorache. London : IntechOpen, 2018. ISBN 9781789231144. eISBN 9781789231151. p. 469-502. DOI: 10.5772/intechopen.71802.

CONSULTING LECTURERS

1. Coordinating lecturer: Diana Ramašauskaitė (Prof. dr.)

2. Daiva Bartkevičienė (Assoc. prof. dr.)

3. Ingrida Pilypienė (Asist. prof. dr.)

APPROVED:

By Council of Doctoral School of Medicine and Health Sciences at Vilnius University
15th of June, 2022

Chairperson of the Board: Prof. Janina Tutkuvienė