



CLINICAL MEDICINE 5

SIXTH YEAR OF STUDIES

Subject:

GYNECOLOGY AND OBSTETRICS

Subject is marked with 10 ESPB with 6 hours of active classes per week. (3 classes of lectures and 3 classes of working in smaller groups)

LECTURERS AND ASSOCIATES :

RB	Name and surname	Email address	
1.	Prof. dr Aleksandra Dimitrijevic	saskadkg@gmail.com	Professor
2.	AP Prof. dr Marija Sorak	soraks@sbb.rs	soraks@sbb.rs
3.	AP dr Petar Arsenijevic	petar.arsenijevic@yahoo.com	Assistant professor
4.	Doc dr Dragan Loncar	drloncarsbb@gmail.com	docent
5.	Doc dr Nikola Jovic	docctorny@gmail.com	docnet
6.	Dr Marija Bicanin Ilic	mlaabahelica@gmail.com	assistant
7.	Dr Aleksandar Nikolov	aleksandar.nikolov2@gmail.com	Lecture associate
8.	Dr Dejana Rakic	dejavulovic@gmail.com	Lecturing associate
9.	Dr Srdjan Mujkovic	drsrdjanmujkovic@gmail.com	Lecutring associate
10.	dr Neda Arsenijevic	velickovicneda@gmail.com	Assistant

STRUCTURE OF THE SUBJECT :

Module	Name of the module	Week	Lectures per week	Little group work per week	Module head lecturer
1	Gynecology	15	3	3	Prof. dr Aleksandra Dimitrijevic
2	Obstetrics	15	3	3	Prof. dr Aleksandra Dimitrijevic
					Σ45+45+90

The student masters the subject in modules. The grade is equivalent to the number of points earned (see tables). Points are earned in three ways:

ACTIVITY DURING LESSONS: Attendance at lectures is mandatory, because in this way students fulfill the requirement for the weekly examination. In this way, the student can gain up to 30 points, and this is because after completing the practical classes, the student answers 2 exam questions from that week of classes and, in accordance with the demonstrated knowledge, gains 0 - 2 points. An alternative to the mentioned examination (in relation to the current epidemiological situation) is to take a weekly activity in the form of a test (on the FMN platform) consisting of 10 questions, where each question is scored with 0.2 points.

FINAL TESTS BY MODULES: In this way, the student can gain up to 30 points, according to the attached table. Module test 1 consists of 28 questions, and module test 2 consists of 32 questions. Each question is scored with 0.5 points.

FINAL (ORAL) EXAMINATION: In this way, the student can gain 40 points, that is, the student answers five questions orally, with each question being scored with a maximum of 8 points. In order to pass the exam, the student must obtain more than 50% points in the final exam. If the student does not get more than 50% of the points in the oral exam, he has not passed the exam.

MODULE		MAXIMUM POINTS			
		Activity during lectures	Tests by modules	Final skills check	Σ
1	Gynecology	14	14		28
2	Obstetrics	16	16		32
				40	40
Σ		30	30	40	100

CONSULTATIVE LECTURES: Consultations can be done with the Head of the Department prof. dr Aleksandra Dimitrijevic (saskadkg@gmail.com) and secretary of the Department dr Dejana Rakic (dejavulovic@gmail.com)

The final grade is formed as follows: In order to pass the course, the student must obtain a minimum of 55 points, pass all modules and pass the final oral exam.

To pass the module the student must:

1. Gain more than 50% points in each module
2. Acquires more than 50% of the points provided for the teaching activity in each module
3. To pass the test from that module, i.e. to have more than 50% correct answers

Number of earned points	Mark
0 – 54	5
55 – 64	6
65 – 74	7
75 – 84	8
85 – 94	9
95 – 100	10

WEEKLY COURSE SCHEDULE

COURSE	TUESDAY
GYNECOLOGY AND OBSTETRICS (3+3)	LECTURES 11:15-13:30 (H5) PRACTICE according to the schedule of the department (Gynecology and obstetrics Clinic UCCK)

LITERATURE:

lectures are available on the website of the Faculty of Medical Sciences: www.medf.kg.ac.rs

TEXTBOOK NAME	AUTHORS	PUBLISHER	LIBRARY
WILLIAMS GYNECOLOGY	Barbara L. Hoffman, John O.Schorge, Lisa M. Halvorson, Cherine A. Hamid, Marlene M. Corton, Joseph I. Shaffer	McGraw-Hill Professional	Not available
WILLIAMS OBSTETRICS	F. Gary Cuninham, Kenneth J.Leveno, Jodi S. Dashe, Barbara L. HOFFMAN, Catherine Y. Spong, Brian M. Casey	McGraw-Hill Professional	Not available

Programe:

FIRST MODULE-GYNECOLOGY

LECTURE SUBJECT 1 (FIRST WEEK):

Anatomy	
Lectures 3 classes	Practice 3 classes
Anatomy (Anterior Abdominal Wall, Pelvic Anatomy, Uterus, Ovaries and Fallopian Tubes, Vagina, Vulva and Perineum, Lower Urinary Tract Structures, Rectum, Pelvic Blood Supply, Pelvic Innervation, Lymphatic Drainage)	Anatomic Disorders (Normal Embryology, Gonadal Differentiation, Congenital Ambiguity of the Genital Tract, Female and Male Pseudohermaphroditism, Hymeneal Defects, Transverse and Longitudinal Vaginal Septum, Müllerian Anomalies, Asherman Syndrome, Cervical, Ovarian and Falopian tube Defects)

LECTURE SUBJECT 2 (SECOND WEEK):

Reproductive Endocrinology, Clinical Hypothalamic – Pituitary - Adrenal Axis Abnormalities, Pediatric and Geriatric Gynecology	
Lectures 3 classes	Practice 3 classes
Reproductive Endocrinology (Reproductive Neuroendocrinology, Hypothalamic - Releasing Peptides, Growth Hormone - Releasing Hormone, Oxytocin, Peptide Hormones in Reproduction, Steroid Hormones in Reproduction, Endocrinology of Pregnancy)	Clinical Hypothalamic – Pituitary - Adrenal Axis Abnormalities (Kallmann Syndrome, Hyperprolactinemia, Pituitary Adenomas, Congenital Adrenal Hyperplasia) - Pediatric and Geriatric Gynecology (Childhood, Reproductive age, Menopause, Senium)

LECTURE SUBJECT 3 (THIRD WEEK):

Normal menstrual cycle, abnormal uterine bleeding	
Lectures 3 classes	Practice 3 classes
<p>Normal Menstrual Cycle (Steroidogenesis Across the Life Span, Ovarian Morphology – Primary, Secondary and Tertiary Follicle, Follicular Phase, Ovulation and Luteal Phase, Endometrium - Histologic Menstrual Cycle Changes, Regulation of Endometrial Tissue Degradation and Hemorrhage, Endometrial Dating and Luteal Phase Defect, Cervical Phase)</p> <p>- Abnormal Uterine Bleeding (Pathophysiology, Menorrhagia and Metrorrhagia, Dysfunctional Uterine Bleeding, Structural Abnormalities, Endometrial Polyp, Coagulopathy)</p>	

LECTURE SUBJECT 4 (FOURTH WEEK):

Amenorrhea, polycystic ovarian syndrome and hyperandrogenism, premenstrual syndrome and dysmenorrhea, pelvic pain	
Lectures 3 classes	Practice 3 classes
<p>Amenorrhea (Hypogonadotropic Hypogonadism, Chromosomal Defects,</p>	

Eugonadotropic Amenorrhea, Acquired
Hypothalamic Dysfunction, Inherited
Abnormalities of the Pituitary Gland, Ovarian
Factor, Exclusion of Pregnancy, Treatment)
- **Polycystic Ovarian Syndrome and
Hyperandrogenism** (Etiology, Pathophysiology,
Signs and Symptoms, Hirsutism, Insulin
Resistance, Acne, Obesity, Diagnosis, Treatment)
- **Premenstrual Syndrome and Dysmenorrhea**
(Etiology, Pathophysiology, Signs and Symptoms,
Diagnosis, Treatment)
- **Pelvic Pain** (Somatic, Visceral, Neuropathic and
Inflammatory Pain, Acute and Chronic Pain,
Diagnosis, Treatment)

LECTURE SUBJECT 5 (FIFTH WEEK):

**Medical history and physical examination, Techniques Used for Imaging in Gynecology, Cancer
Screening, Invasive diagnostic procedures**

Lectures 3 classes	Practice 3 classes
Medical History and Physical Examination (Anamnesis, Pelvic Examination, Speculum Examination, Bimanual Examination, Rectovaginal Examination, Hormonal analyses) - Techniques Used for Imaging in Gynecology (Sonography, Doppler Technology, Radiography, Hysterosalpingography, Computed Tomography, Magnetic Resonance Imaging) - Cancer Screening (Cervical Cancer – Colposcopy and Papanicolaou test, Bethesda classification, Endometrial Cancer, Ovarian Cancer, Vaginal secret, TU markers)	

- **Invasive Diagnostic Procedures** (Vulvar, Vaginal and Cervical Biopsy, Hysteroscopy, Polypectomy, Endometrial Biopsy, Dilatation of Cervical Canal, Endocervical Curettage)

LECTURE SUBJECT 6 (SIXTH WEEK):

Gynecological infection, pelvic inflammatory disease, sexually transmitted diseases	
Lectures 3 classes	Practice 3 classes
<ul style="list-style-type: none"> - Gynecologic Infection (Normal Vaginal Flora, Bacterial Vaginosis, Genital Ulcer Infections, Syphilis, Granuloma Inguinale, Lymphogranuloma Venereum, Fungal Infection, Trichomoniasis, Suppurative Cervicitis, Chlamydia trachomatis) - Pelvic Inflammatory Disease (Acute and Chronic PID, Abscess gl. Bartholin, Postoperative Infection, Pelvic Cellulitis, Pelvic Abscess, Toxic Shock Syndrome, Fasciitis, Peritonitis) - Sexually transmitted diseases (AIDS, HPV, HSV1, HSV2, Hepatitis) 	

LECTURE SUBJECT 7 (SEVENTH WEEK):

Endometriosis, ectopic pregnancy, gestational trophoblastic disease	
Lectures 3 classes	Practice 3 classes
<ul style="list-style-type: none"> - Endometriosis (Etiology, Pathophysiology, Risk Factors, Classification and Location of 	

Endometriosis, Patient Symptoms, Differential Diagnosis, Diagnosis, Treatment)

- **Ectopic Pregnancy** (Classification, Epidemiology, Pathophysiology, Risk Factors, Clinical Manifestations, Differential Diagnosis, Diagnosis, Treatment - Surgical and Medical)

- **Gestational Trophoblastic Disease** (Hydatidiform Mole – Complete and Incomplete, Invasive Mole, Gestational Choriocarcinoma, Placental Site Trophoblastic Tumor)

LECTURE SUBJECT 8 (EIGHTH WEEK):

Contraception, first trimester abortion	
Lectures 3 classes	Practice 3 classes
<p>Contraception (Hormonal Contraceptives, Transdermal Administration, Transvaginal Administration, Intramuscular Administration, Intrauterine Contraceptive Device, Male and Female Condom, Spermicides and Microbicides, Diaphragm Plus Spermicide, Contraceptive Sponge, Cervical Cap, Contraceptive Method, Sterilization)</p> <p>- First-Trimester Abortion (Missed Abortion, Incomplete and Complete Abortion, Septic Abortion, Threatened Abortion, Therapeutic Abortion, Techniques for Early Abortion – Surgical and Medical)</p>	

LECTURE SUBJECT 9 (NINTH WEEK):

Evaluation of the infertile couple, treatment of infertile couple	
Lectures 3 classes	Practice 3 classes

Evaluation of the Infertile Couple (Epidemiology, Etiology, Medical History, Physical Examination, Evaluation for Specific Causes of Infertility, Radiologic and Surgical Approaches for Evaluation of Pelvic Structures, Semen Analysis)

- Treatment of the Infertile Couple (Lifestyle Therapies, Correction of Ovarian Dysfunction, Complications of Fertility Drugs – OHSS, Tubal Reconstruction, Correction of Male Infertility, Intrauterine Insemination, Assisted Reproductive Technologies – IVF, ICSI, GIFT, ZIFT, Cryopreservation, Pre-Implantation Genetic Diagnosis - PGD)

LECTURE SUBJECT 10(TENTH WEEK):

Pelvis mass and pelvic organ prolapse	
Lectures 3 classes	Practice 3 classes
<p>Pelvic Mass – Uterus (Leiomyomas - Pathologic Appearance, Role of Hormones, Risk Factors, Classification, Symptoms, Diagnosis, Management, Hematometra, Adenomyosis)</p> <p>- Pelvic Mass – Ovary (Cystic Ovarian Masses - Pathologic Appearance, Role of Hormones, Risk Factors, Classification, Symptoms, Diagnosis, Management, Torsion of Adnexal Masses)</p> <p>- Paraovarian Mass – (Paraovarian and Paratubal Cysts, Hydrosalpinx, Tubo-Ovarian Abscess - Symptoms, Diagnosis, Management)</p> <p>- Pelvic Organ Prolapse (Risk Factors,</p>	

Classification, Symptoms, Diagnosis, POP-Q
Quantification, Management)

LECTURE SUBJECT 11 (ELEVENTH WEEK):

Preinvasive lesions of the lower genital tract	
Lectures 3 classes	Practice 3 classes
<p>- Preinvasive Lesions of the Lower Genital Tract (External Genitalia – VIN and VaIN, Cervix – CIN, Squamocolumnar Junction, Human Papillomavirus, Diagnosis of Infection, Treatment, Prevention, Cervical Screening Technologies, Management of Histologic Cervical Intraepithelial Neoplasia)</p> <p>- Cancer of the Vulva and Vagina (Incidence, Pathophysiology, Epidemiology and Risk Factors, Staging and Classification, Symptoms, Diagnosis, Prognosis and Prognostic Factors, Treatment)</p> <p>- Cervical Cancer (Incidence, Pathophysiology, Epidemiology and Risk Factors, Histologic Types, Staging and Classification, Symptoms, Diagnosis, Prognosis and Prognostic Factors, Treatment)</p>	

LECTURE SUBJECT 12 (TWELFTH WEEK):

Endometrial hyperplasia, endometrial cancer, uterine sarcoma	
Lectures 3 classes	Practice 3 classes
<p>Endometrial Hyperplasia (Risk Factors, Classification, Diagnosis, Treatment)</p> <p>- Endometrial Cancer (Incidence, Pathophysiology, Epidemiology and Risk Factors, Histologic Types, Staging and Classification, Symptoms, Diagnosis, Prognosis and Prognostic</p>	

Factors, Treatment)
- Uterine Sarcoma (Incidence, Epidemiology and Risk Factors, Pathogenesis, Epidemiology and Risk Factors, Histologic Types, Symptoms, Diagnosis, Prognosis and Prognostic Factors, Treatment)

LECTURE SUBJECT 13 (THIRTEENTH WEEK):

Ovarian cancer	
Lectures 3 classes	Practice 3 classes
<p>. - Epithelial Ovarian Cancer (Incidence, Epidemiology and Risk Factors, Pathogenesis, Epidemiology and Risk Factors, Histologic Grade, Histologic Type, Symptoms, Diagnosis - Genetic Testing, Prognosis and Prognostic Factors, Treatment)</p> <p>- Ovarian Germ Cell and Sex Cord–Stromal Tumors (Incidence, Epidemiology and Risk Factors, Pathogenesis, Epidemiology and Risk Factors, Classification, Symptoms, Diagnosis, Prognosis and Prognostic Factors, Treatment)</p>	

LECTURE SUBJECT 14 (FOURTEENTH WEEK):

Principles of chemotherapy and radiation therapy, surgical procedure in gynecology

Lectures 3 classes	Practice 3 classes
Principles of Chemotherapy and Radiation Therapy - Surgical Procedure in Gynecology (MIC, Laparoscopy, Hysteroscopy, Conisatio, Reconstructive Procedures, Laparotomy, Salpingectomy, Ovariectomy, Adnexectomy, Myomectomy, Hysterectomy, Radical Hysterectomy) – Indications, Techniques, Types and Principals	

LECTURE SUBJECT15 (FIFTHTEENTH WEEK):

Breast disease	
Lectures 3 classes	Practice 3 classes

Breast Disease (Ductal System, Lymphatic Drainage, Development and Physiology, Evaluation of a Breast Lump, Diagnostic Imaging, Breast Infections, Benign Proliferative Breast Disease, Breast Cancer)

Second semester: obstetrics**LECTURE SUBJECT 1(FIRST WEEK):**

Implantation, embryogenesis and placental development	
Lectures 3 classes	Practice 3 classes

Implantation, Embryogenesis and Placental Development (The Ovarian–Endometrial Cycle, The Decidua, Fertilization and Implantation, The Blastocyst, Embryonic Development after Implantation, Placental Growth and Maturation, Fetal and Maternal Circulation, Placental Hormones, Diagnosis of Pregnancy)

- Fetal Growth and Development (Morphological Growth, Ovum, Zygote, and Blastocyst, The Placenta and Fetal Growth, Placental Transfer, Fetal Nutrition, Amnionic Fluid, Umbilical Cord and Membranes)

LECTURE SUBJECT 2 (SECOND WEEK):

Maternal Physiology. Chromosomal Abnormalities, Prenatal Diagnoses

Lectures 3 classes	Practice 3 classes
<p>- Maternal Physiology (Reproductive Tract, Metabolic Changes, Hematological Changes, Cardiovascular System, Respiratory Tract, Urinary System, Endocrine System)</p> <p>Chromosomal Abnormalities (Teratology, Genetic and Physiological Mechanisms of Teratogenicity, Abnormalities of Chromosome Number, Abnormalities of Chromosome Structure, Modes of Inheritance, Genetic Tests)</p> <p>- Prenatal Diagnosis (Prenatal Diagnosis of Neural-Tube Defects, Prenatal Diagnosis of Down Syndrome and Other Aneuploidies, Sonographic Screening for Aneuploidy, Soft and Hard Signs, Fetuses at Increased Risk for Genetic Disorders, Diagnostic Techniques – CVS, AC, CC, NYPT), Twin-Twin Transfusion Syndrome)</p>	

LECTURE SUBJECT 3 (THIRD WEEK):

Multifetal Gestation, Fetal Growth Disorders, Disorders of Amnionic Fluid Volume

Lectures 3 classes	Practice 3 classes
<ul style="list-style-type: none"> - Multifetal Gestation (Etiology of Multifetal Gestations, Diagnosis of Multiple Fetuses, Sonographic Evaluation, Maternal Adaptation to Multifetal Pregnancy, Pregnancy Outcome, Unique Complications, Twin-Twin Transfusion Syndrome, Discordant Twins, Twin Demise, Antepartum Management of Twin Pregnancy, Preterm Labor Prediction, Labor and Delivery, Triplet or Higher-Order Gestation) - Fetal Growth Disorders (Normal Fetal Growth, Fetal-Growth Restriction, Macrosomia) - Disorders of Amnionic Fluid Volume (Normal Amnionic Fluid Volume, Hydramnios, Oligohydramnios) - 	

LECTURE SUBJECT 4 (FORTH WEEK):
Antepartum Assessment, Parturition

Lectures 3 classes	Practice 3 classes
<ul style="list-style-type: none"> - Antepartum Assessment (Fetal Movements, Fetal Breathing, Fetal Monitoring, Contraction 	

Stress Testing, Nonstress Tests, Biophysical Profile, Amnionic Fluid Volume, Current Antenatal Testing Recommendations, Sonography in Obstetrics, NMR)

- **Parturition** (Phases of Parturition, Physiological and Biochemical Processes Regulating Parturition)

LECTURE SUBJECT 5 (FIFTH WEEK):

Normal labor and delivery, Labor induction	
Lectures 3 classes	Practice 3 classes
<p>Normal Labor and Delivery (Mechanisms of Labor, Leopold Maneuvers, Vaginal Examination, Mechanisms of Labor with Occiput Anterior Presentation, Characteristics of Normal Labor, Management of Normal Labor and Delivery, Spontaneous Delivery, Delivery of the Shoulders, Delivery of the Placenta, Episiotomy)</p> <p>- Labor Induction (Bishop Scoring, Pharmacological Techniques, Mechanical Techniques, Membrane Stripping for Labor Induction, Labor Induction and Augmentation with Oxytocin, Amniotomy)</p>	

LECTURE SUBJECT 6 (SIXTH WEEK):

Abnormal Labor, Breech Presentation and Delivery	
Lectures 3 classes	Practice 3 classes
<ul style="list-style-type: none"> - Abnormal Labor (Overview of Dystocia, Abnormalities of the Expulsive Forces, Precipitous Labor and Delivery, Fetopelvic Disproportion, Brow Presentation, Persistent Occiput Transverse Position, Persistent Occiput Posterior Position, Shoulder Dystocia) - Breech Presentation and Delivery (Associated Factors, Diagnosis, Complications, Techniques for Breech Delivery, Version) 	

LECTURE SUBJECT 7 (SEVENTH WEEK):

Preterm birth, Postterm pregnancy	
Lectures 3 classes	Practice 3 classes
<ul style="list-style-type: none"> - Preterm Birth (Mortality Rates of Preterm Infants, Morbidity in Preterm Infants, Mortality and Morbidity at the Lower and Upper Extremes of Prematurity, Reasons for Preterm Delivery, Antecedents and Contributing Factors, Diagnosis, Prevention of Preterm Birth, PPRM, Management of Preterm Rupture of Membranes and Preterm Labor, Preterm Labor with Intact Membranes) - Postterm Pregnancy (Perinatal Mortality, 	

Pathophysiology, Complications, Management)

LECTURE SUBJECT 8 (EIGHT WEEK):

Cesarean Delivery, Forceps Delivery and Vacuum Extraction	
Lectures 3 classes	Practice 3 classes
<p>Cesarean Delivery (Contemporary Status of Cesarean Delivery, Technique for Cesarean Delivery, Prior Cesarean Delivery, Trial of Labor versus Repeat Cesarean Delivery, Candidates for a Trial of Labor, Labor and Delivery Considerations, Complications with Multiple Repeat Cesarean Deliveries, Uterine Rupture)</p> <p>- Forceps Delivery and Vacuum Extraction (Forceps Designs, Forceps Application, Morbidity from Forceps Operations, Indications and Prerequisites for Vacuum Delivery, Comparison of Vacuum Extraction with Forceps)</p>	

LECTURE SUBJECT 9 (NINTH WEEK):

Obstetrical Hemorrhage, Placental abruption	
Lectures 3 classes	Practice 3 classes

- **Obstetrical Hemorrhage** (Overview, Implications, and Classification, Antepartum and Postpartum Hemorrhage, Hemostasis at the Placental Site, Clinical Characteristics)
- **Placental Abruption** (Significance and Frequency, Etiology and Associated Factors, Pathology, Clinical Diagnosis, Management)
- **Placenta Previa** (Incidence, Associated Factors, Clinical Findings, Diagnosis, Management of Placenta Previa)
- **Other Obstetrical Hemorrhage** (Uterine Atony, Placenta Accreta, Increta, and Percreta, Inversion of the Uterus, Genital Tract Lacerations, Puerperal Hematomas, Rupture of the Uterus, Hypovolemic Shock)

LECTURE SUBJECT 10 (TENTH WEEK):

Cardiovascular disease in pregnancy, pregnancy hypertension	
Lectures 3 classes	Practice 3 classes
<ul style="list-style-type: none"> - Cardiovascular Disease in Pregnancy (Diagnosis of Heart Disease, Clinical Classification of Heart Disease, Valvular Heart Disease, Congenital Heart Disease, Pulmonary Hypertension, Diseases of the Aorta, Ischemic Heart Disease, General Management) - Pregnancy Hypertension (Terminology and Classification, Diagnosis, Incidence and Risk Factors, Etiopathogenesis, Pathophysiology, Prediction and Prevention, Management, Delivery) 	

LECTURE SUBJECT 11 (EVENTH WEEK):

Diabetes in Pregnancy, thyroid and other endocrine disorders in pregnancy

Lectures 3 classes

Practice 3 classes

- **Thyroid and Other Endocrine Disorders in Pregnancy** (Autoimmunity and Thyroid Disease, Hyperthyroidism, Thyroid Storm and Heart Failure, Hypothyroidism, Pheochromocytoma, Cushing Syndrome, Prolactinomas, Fetal and Neonatal Effects)

- **Diabetes in Pregnancy** (Terminology and Classification, Diagnosis, Incidence and Risk Factors, Etiopathogenesis, Pathophysiology, Prediction and Prevention, Management, Delivery)

LECTURE SUBJECT 12 (TWELFTH WEEK):

Hematological and thromboembolic disorders in pregnancy

Lectures 3 classes

Practice 3 classes

- **Hematological Disorders in Pregnancy** (Anemias, Hemoglobinopathies, Platelet Disorders - Classification, Pathophysiology, Clinical Findings, Diagnosis, Management)

- **Thromboembolic Disorders in Pregnancy** (Thrombophilias, Deep-Venous Thrombosis, Pulmonary Embolism - Classification, Pathophysiology, Clinical Findings, Diagnosis, Thromboprophylaxis, Management)

LECTURE SUBJECT 13 (THIRTEENTH WEEK):

Pulmonary, renal and urinary tract and gastrointestinal disorders in Pregnancy	
Lectures 3 classes	Practice 3 classes
<p>- Pulmonary Disorders in Pregnancy (Asthma, Pneumonia, Tuberculosis - Classification, Pathophysiology, Clinical Findings, Diagnosis, Management)</p> <p>- Renal and Urinary Tract Disorders in Pregnancy (Urinary Tract Infections, Nephrolithiasis, Chronic Renal Disease, Acute Renal Failure - Classification, Pathophysiology, Clinical Findings, Diagnosis, Management)</p> <p>- Gastrointestinal Disorders in Pregnancy (Hyperemesis gravidarum, Helicobacter pylori Infection, Disorders of the Small Bowel and Colon, Appendicitis, Hepatic Disorders - Classification, Pathophysiology, Clinical Findings, Diagnosis, Management)</p>	

LECTURE SUBJECT 14 (FOURTEENTH WEEK):

Infectious and neoplastic diseases in Pregnancy

Lectures 3 classes	Practice 3 classes
<p>- Infectious Diseases in Pregnancy (Viral Infections - Varicella-Zoster Virus, Influenza, Rubella, Parvovirus, CMV, EBV, Bacterial Infections - Group A Streptococcus, GBS, MRSA, Toxoplasmosis - Classification, Pathophysiology, Clinical Findings, Diagnosis, Management, Vaccination)</p> <p>- Neoplastic Diseases in Pregnancy (Principles of Cancer Therapy during Pregnancy, Breast Carcinoma, Lymphoid Cell Malignancies, Malignant Melanoma, Reproductive Tract Neoplasia, Other Tumors)</p> <p>- Other Diseases in Pregnancy (Neurological and Psychiatric Disorders – Epilepsy, Ischemic Stroke, Multiple Sclerosis, Schizophrenia, Dermatological Disorders – Pigmentation, Striae Gravidarum, Herpes Gestationis)</p>	

LECTURE SUBJECT 15 (FIFTEENTH WEEK):

The Puerperium, the newborn infant	
Lectures 3 classes	Practice 3 classes
<p>- The Puerperium (Anatomical, Physiological, and Clinical Aspects, Breasts and Lactation, Care of the Mother during the Puerperium, Puerperal Infection - Uterine Infection,</p>	

Infections of the Perineum, Vagina, and Cervix,
Toxic Shock Syndrome, Mastitis)

- The Newborn Infant (Management of
Delivery, Preventive Care, Routine Newborn
Care, Diseases Common in the Preterm Fetus
and Newborn)

Class schedule

Semester	Week	Lecture subject	professor
1 st	I	Anatomy	Prof dr Petar Arsenijevic
1 st	II	Reproductive Endocrinology, Clinical Hypothalamic – Pituitary - Adrenal Axis Abnormalities, Pediatric and Geriatric Gynecology	Prof. dr Aleksandra Dimitrijevic
1 st	III	Normal menstrual cycle, abnormal uterine bleeding	Prof dr Marija Sorak
1 st	IV	Amenorrhea, polycystic ovarian syndrome and hyperandrogenism, premenstrual syndrome and dysmenorrhea, pelvic pain	Prof. dr Aleksandra Dimitrijevic Prof. dr Marija Sorak
1 st	V	Medical history and physical examination, Techniques Used for Imaging in Gynecology, Cancer Screening, Invasive diagnostic procedures	Prof. dr Petar Arsenijevic
1 st	VI	Gynecological infection, pelvic inflammatory disease, sexually transmitted diseases	Prof. dr Aleksandra Dimitrijevic

1 st	VII	Endometriosis, ectopic pregnancy, gestational trophoblastic disease	Prof. dr Marija Sorak
1 st	VIII	Contraception, first trimester abortion	Prof. dr Marija Sorak Prof. dr Aleksandra Dimitrijevic
1 st	IX	Evaluation of the infertile couple, treatment of infertile couple	Prof. dr Marija Sorak
1 st	X	Pelvis mass and pelvic organ prolapse	Prof. dr Petar Arsenijevic
1 st	XI	Preinvasive lesions of the lower genital tract	Prof. dr Petar Arsenijevic Prof. dr Aleksandra Dimitrijevic
1 st	XII	Endometrial hyperplasia, endometrial cancer, uterine sarcoma	Prof. dr Aleksandra Dimitrijevic
1 st	XIII	Ovarian cancer	Prof. dr Marija Sorak
1 st	XIV	Principles of chemotherapy and radiation therapy, surgical procedure in gynecology	Prof. dr Marija Sorak
1 st	XV	Breast disease	Prof. dr Petar Arsenijevic
2 nd	I	Implantation, embryogenesis and placental development	Prof. dr Marija Sorak
2 nd	II	Maternal Physiology. Chromosomal Abnormalities, Prenatal Diagnoses	Prof. dr Aleksandra Dimitrijevic
2 nd	III	Multifetal Gestation, Fetal Growth Disorders, Disorders of Amnionic Fluid Volume	Prof. dr Petar Arsenijevic
2 nd	IV	Antepartum Assessment, Parturition	Prof. dr Marija Sorak
2 nd	V	Normal labor and delivery, Labor induction	Prof. dr Marija Sorak
2 nd	VI	Abnormal Labor, Breech Presentation and Delivery	Prof. dr Aleksandra Dimitrijevic
2 nd	VII	Preterm birth, Postterm pregnancy	Prof. dr Petar Arsenijevic

2 nd	VIII	Cesarean Delivery, Forceps Delivery and Vacuum Extraction	Prof. dr Marija Sorak
2 nd	IX	Obstetrical Hemorrhage, Placental abruption	Prof. dr Aleksandra Dimitrijevic
2 nd	X	Cardiovascular disease in pregnancy, pregnancy hypertension	Prof. dr Petar Arsenijevic
2 nd	XI	Diabetes in Pregnancy, thyroid and other endocrine disorders in pregnancy	Prof. dr Aleksandra Dimitrijevic
2 nd	XII	Hematological and thromboembolic disorders in pregnancy	Prof. dr Petar Arsenijevic
2 nd	XIII	Pulmonary, renal and urinary tract and gastrointestinal disorders in Pregnancy	Prof. dr Marija Sorak
2 nd	XIV	Infectious and neoplastic diseases in Pregnancy	Prof. dr Aleksandra Dimitrijevic
2 nd	XV	The Puerperium, the newborn infant	Prof. dr Petar Arsenijevic

Class schedule

Semester	Week	Practice subject	professor
1 st	I	Anatomy	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	II		Doc. dr Dragan Loncar

		Reproductive Endocrinology, Clinical Hypothalamic – Pituitary - Adrenal Axis Abnormalities, Pediatric and Geriatric Gynecology	Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	III	Normal menstrual cycle, abnormal uterine bleeding	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	IV	Amenorrhea, polycystic ovarian syndrome and hyperandrogenism, premenstrual syndrome and dysmenorrhea, pelvic pain	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	V	Medical history and physical examination, Techniques Used for Imaging in Gynecology, Cancer Screening, Invasive diagnostic procedures	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	VI	Gynecological infection, pelvic inflammatory disease, sexually transmitted diseases	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic

			dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	VII	Endometriosis, ectopic pregnancy, gestational trophoblastic disease	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	VIII	Contraception, first trimester abortion	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	IX	Evaluation of the infertile couple, treatment of infertile couple	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	X	Pelvis mass and pelvic organ prolapse	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic

			dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	XI	Preinvasive lesions of the lower genital tract	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	XII	Endometrial hyperplasia, endometrial cancer, uterine sarcoma	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	XIII	Ovarian cancer	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	XIV	Principles of chemotherapy and radiation therapy, surgical procedure in gynecology	dr Nikola Jovic dr Marija Bicanin Ilic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
1 st	XV	Breast disease	Doc. dr Dragan Loncar

			Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	I	Implantation, embryogenesis and placental development	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	II	Maternal Physiology. Chromosomal Abnormalities, Prenatal Diagnoses	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic dr Aleksandra Mitrovic
2 nd	III	Multifetal Gestation, Fetal Growth Disorders, Disorders of Amnionic Fluid Volume	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	IV	Antepartum Assessment, Parturition	Doc. dr Dragan Loncar Doc. dr Nikola Jovic

			dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	V	Normal labor and delivery, Labor induction	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	VI	Abnormal Labor, Breech Presentation and Delivery	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	VII	Preterm birth, Postterm pregnancy	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	VIII	Cesarean Delivery, Forceps Delivery and Vacuum Extraction	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic

			dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	IX	Obstetrical Hemorrhage, Placental abruption	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	X	Cardiovascular disease in pregnancy, pregnancy hypertension	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	XI	Diabetes in Pregnancy, thyroid and other endocrine disorders in pregnancy	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	XII	Hematological and thromboembolic disorders in pregnancy	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov

			dr Srdjan Mujkovic
2 nd	XIII	Pulmonary, renal and urinary tract and gastrointestinal disorders in Pregnancy	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	XIV	Infectious and neoplastic diseases in Pregnancy	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic
2 nd	XV	The Puerperium, the newborn infant	Doc. dr Dragan Loncar Doc. dr Nikola Jovic dr Marija Bicanin Ilic dr Neda Arsenijevic dr Dejana Rakic dr Aleksandar Nikolov dr Srdjan Mujkovic

I group (embryology, anatomy, endocrinology, infertility, family planning, and diagnostics procedures in gynecology)

1. Embryological development of the female genital tract
2. Developmental disorders of the female genital tract
3. Anatomy of external and internal parts of the female genital tract
4. Hypothalamic - pituitary axis and its dysfunction
5. Ovarian steroid hormones
6. Non- invasive diagnostics procedures in gynecology (assessing ovarian function, ultrasounds, colposcopy, PAP smear, radiological procedures)
7. Invasive diagnostics procedures in gynecology (biopsy, explorative curettage, HSG, hysteroscopy, culdocentesis)
8. Women's life stages (infancy, puberty, reproductive age)
9. Women's life stages (climacteric period, menopause, senium)
10. Physiology of the menstrual cycle
11. Disorders of rhythm, intensity and duration of the menstrual cycle
12. Amenorrhea
13. Polycystic ovary syndrome and hirsutism
14. Dysmenorrhea, premenstrual syndrome and chronic pelvic pain syndrome
15. Male and female infertility (diagnostics and treatment)
16. Assisted reproductive techniques
17. Contraception and family planning
18. Intentional termination in early and in late stages of pregnancy

II group (inflammatory and tumor processes in gynecology)

1. Inflammatory processes of the vagina, cervix and Bartholin gland
2. Bacterial vaginosis
3. Inflammatory processes of the uterus, ovaries and the fallopian tubes
4. Genital tuberculosis
5. Endometriosis
6. Diffused peritonitis from genital origins
7. Pelviperitonitis
8. Sexually transmitted diseases
9. Benign and malignant tumors of vulva and vagina, and their precancerous lesions
10. Benign tumors of the cervix and its precancerous lesions
11. Malignant tumors of the cervix and HPV infection
12. Benign tumors of the uterus
13. Malignant tumors of the uterus
14. Benign and malignant tumors of the ovaries and the fallopian tubes
15. Gestational trophoblastic disease
16. Static disorders in the female reproductive tract
17. Diseases of the breast

III group (early and late pregnancy, pathological conditions in pregnancy)

1. Gametogenesis, fertilization and implantation
2. Embryonal and fetal stage of development
3. Congenital fetal anomalies
4. Development, morphology and function of the placenta, umbilical cord and amniotic fluid
5. Diagnosis of early pregnancy and prenatal assessments
6. Ectopic pregnancy
7. Maternal adaptations that occur in pregnancy
8. Methods of prenatal diagnostics (double test, CVS, amniocentesis, cordocentesis)
9. Spontaneous abortion and imminent abortion
10. Early gestosis
11. Hypertensive syndrome in pregnancy, preeclampsia, eclampsia
12. Endocrine disorders in pregnancy - gestational diabetes and Diabetes mellitus type I

13. Cardiovascular and hematological diseases in pregnancy
14. Immunological aspects of pregnancy - RH incompatibility
15. Surgical diseases in pregnancy
16. Diseases of the urinary tract during pregnancy
17. Infections in pregnancy
18. Placenta previa
19. Early shedding of the normally implanted placenta- abruptio placentae
20. Intrauterine fetal growth restriction
21. Pathology of amniotic fluid and umbilical cord

IV group

1. Signs, causes of the beginning and factors of labour
2. The fetus as a object of birth
3. The first and the second stage of labour
4. The third and the fourth stage of labour
5. Normal and abnormal uterine activity – dystocia
6. Rotational anomalies of the fetal head and asynclitism
7. Fetal head deflection anomalies
8. Pelvic presentation and manual assistance during pelvic delivery
9. Multiple pregnancy and labour
10. Premature and preterm rupture of amniotic membranes
11. Preterm pregnancy and labour
12. Postterm pregnancy and labour
13. Hemorrhagic shock in obstetrics - uterine atony
14. External examination of a pregnant woman
15. Internal examination of a pregnant woman- Bishop skor
16. Intrapartum fetal monitoring - CTG, PH measurement, importance of amniotic fluid
17. Rupture of the uterus and prolapse of the umbilical cord
18. Physiological puerperium
19. Pathological puerperium

V group

1. Operative procedures on the uterus (hysterectomy, myomectomy)
2. Operative procedures on adnexa (adnexectomy, sterilization)
3. Operative procedures on the cervix (conization, cerclage)
4. Laparoscopic procedures in gynecology
5. Caesarean section
6. Vacuum extraction of fetus
7. Forceps delivery
8. Episiotomy and injury of soft birth canal
9. Anesthesia and analgesia in labour
10. Use of medicines and vaccination during pregnancy
11. Instrumental and manual revision of the uterine cavity
12. Embryotomies
13. Newborn - Apgar score
14. Characteristics of preterm and postterm newborns
15. Characteristics of newborns from high-risk pregnancies
16. Resuscitation of an asphyxiated newborn
17. Forensic-medical problems in ginekology and obstetrics
18. Genetic counseling