

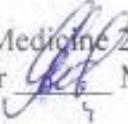


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Approved

At the meeting of the Faculty Council  
Medicine No.2  
Minutes No. 3 of 25.02.2014

Dean of the Faculty of Medicine  
PhD, associate professor  M. Betiu

Approved

At the meeting of the chair of Obstetrics and  
Gynecology  
Minutes No. 6 of 24.02.14

Head of the chair,  
PhD, Professor  V. Friptu

### SYLLABUS FOR STUDENTS OF THE FACULTY OF MEDICINE No 2

Name of the course: **OBSTETRICS AND GYNECOLOGY**

Code of the course: **Obstetrics 5.08.O.067**  
**Gynecology 5.09.O.085**

Type of course: **compulsory**

**Total number of hours** – Obstetrics: 140 hours  
Gynecology: 70 hours  
Emergencies in obstetrics and gynecology: 35 hours  
Optional course on family planning : 14 hours

**lectures** – Obstetrics 40 hours, Gynecology 20 hours, Emergencies in obstetrics and gynecology 10 hours, Optional course on family planning 14 hours.

**practical lessons** - Obstetrics 100 hours, Gynecology 50 hours, Emergencies in obstetrics and gynecology 25 hours.

**Number of credits provided for the course:** Obstetrics 7 credits, Gynecology 3 credits, Emergencies in obstetrics and gynecology 1 credit, Optional course on family planning 1 credit.

**Lecturers teaching the course:**

Valentin Friptu, Head of Department, PhD, professor;  
Corina Cardaniuc, associate professor, MD;  
Stelian Hodoroagea, associate professor, MD;  
Ana Musteata, associate professor, MD;  
Natalia Corolcova, associate professor, MD;  
Nadejda Codreanu, associate professor, MD;  
Rodica Comendant, associate professor, MD;  
Liliana Profire, lecturer, MD;  
Luminita Mihalcean, lecturer, MD;  
Larisa Catrinici, lecturer;

Mihail Surguci, associate professor, MD;  
Tatiana Belousov, associate professor, MD;  
Iacob Metaxa, associate professor, MD;  
Ion Bologan, associate professor, MD;  
Constantin Burnusus, associate professor, MD;  
Olga Popusoi, associate professor, MD;  
Angela Pavlenco, associate professor, MD;  
Rodica Catrinici, lecturer, MD;  
Vitalie Mamaliga, lecturer;  
Tatiana Revencu, lecturer.

**Chisinau 2014**



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**I. Aim of the discipline.** The aim of the program is to offer the student an environment and directions necessary for accumulation of knowledge and essential practical skills for diagnosis, prevention and treatment of diseases of female reproductive system, care of the woman during normal and pathological pregnancy and childbirth, care of the fetus in the antepartum period and care of newborn after delivery, essential surgery on genital organs, management of endocrine, functional and organic disturbances in adolescents, management of infertility and menopausal problems. The aim of the program also includes offering essential knowledge and abilities in gynecological oncology, perinatal medicine and reproductive health.

### **II. Objectives obtained in teaching the discipline**

#### **1. At the level of knowledge and understanding**

- to get general knowledge on essential problems of Obstetrics-Gynecology and Family planning;
- to obtain competences and skills for diagnosis of pregnancy, monitoring of normal and pathological pregnancy;
- to recognize obstetrical and gynecological emergencies and plan the management;
- to obtain knowledge on gynecological pathology with focus on screening methods, diagnosis and treatment of gynecological oncological pathology;
- to know general issues on diagnosis and treatment of infertility, and of methods of family planning;
- to make prenatal diagnosis, antepartum care, determine prognosis of labor and delivery;
- to administer drugs during pregnancy;
- to diagnose and manage pathological pregnancy;
- to diagnose and manage gynecological emergencies. To be competent in diagnosing acute abdomen caused by gynecological diseases. Diagnosis of ectopic pregnancy;
- to be competent in recognizing amenorrhea, menorrhagia, metrorrhagia;
- to be competent in prescription of methods of contraception and counseling;
- to explain principles of screening of genital and breast cancers;
- to identify an infection of a female genital tract, prescribe treatment

#### **2. At the level of application**

- To use medical technics for evaluation of gynecological problems (speculum exam, bimanual vaginal exam). Breast examination;
- To use technics for diagnosis of pregnancy;
- To know Management of labor and delivery (pelviometry, fetal heart auscultation, Leopold maneuver, complication of the III-rd and IV-th period of labor, episiotomy, manual removal of placenta ect);
- To use methods of screening, diagnosis and treatment of oncological gynecological diseases.

#### **3. At the level of integration**

- To appreciate the importance of Obstetrics and Gynecology in the context of medicine;
- To creatively address problems of clinical medicine;
- To infer interrelationships between Obstetrics / Gynecology and clinical disciplines;
- To achieve skills to implement and integrate knowledge acquired at the discipline Obstetrics and Gynecology with fundamental disciplines;
- Be able to assess and self-assess objective knowledge in the field;
- Be able to assimilate new developments in the field of Obstetrics and Gynecology and integrate them with other medical disciplines



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### ***III. Provisional terms and conditions:***

Obstetrics and gynecology is a medical discipline that studies normal and pathological morphophysiology of female genital organs during reproductive biological processes and provides prophylaxis and therapy of gynecological pathologies. Obstetrics and gynecology are specialties of emergency, requiring a good knowledge and understanding of the discipline's specific concepts. Obstetrics and gynecology is one of the largest specialties with very diverse fields of study, and connections with a number of other specialties as: endocrinology , internal medicine , etc. Two major characteristics of obstetrics and gynecology are separate volume and complexity of knowledge required and its particular social importance. For better assimilation of the discipline knowledge obtained in the first three years of study in the fields of biology, chemistry, anatomy, histology, biochemistry and pharmacology, morphopathology and pathophysiology is required.

### ***IV. Main theme of the course:***

#### **OBSTETRICS:**

##### *A. Lectures:*

<b>Nr.</b>	<b>Tema</b>	<b>Ore</b>
1.	Physiology of normal pregnancy. Fecundation, migration, implantation and embryogenesis. Development, structure and role of placenta.	2
2.	Morphofunctional changes during pregnancy.	2
3.	Critical periods during intrauterine development of fetus. Risk factors for mother and fetus during pregnancy.	2
4.	General principles of organization of perinatal service in RM. Perinatal and maternal health indicators.	2
5.	Antenatal care. Antenatal medical chart. Symphysis-fundus growth chart. Prenatal diagnosis.	2
6.	Feto-placental insufficiency and its consequences.	2
7.	Preterm labor and delivery. Principles of management. Prelabor rupture of membranes.	2
8.	Hypertensive disorders of pregnancy.	2
9.	Infections during pregnancy.	2
10.	Heart diseases and pregnancy.	2
11.	Renal and hematological diseases during pregnancy.	2
12.	Pulmonary and hepatic pathology in pregnancy.	2
13.	Operative obstetrics. Cesarean section.	2
14.	Rh-incompatibility.	2
15.	Recurrent abortion.	2
16.	Postpartum sepsis and infectious complications.	2
17.	Management of pregnancy in women with endocrine pathology. Diabetes and pregnancy.	2
18.	Physiology and pathology of amniotic fluid.	2
19.	Minor problems during pregnancy.	2
20.	Minor problems during pregnancy.	2



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### *B. Practical lessons:*

Nr.	Tema	Ore
1.	Anatomy and physiology of reproductive system organs. Obstetrical pelvis. General obstetrical examination. Fetus at term.	5
2.	Antenatal care. Antenatal medical chart. Symphysis-fundus growth chart. Diagnosis of pregnancy in the first and second trimester.	5
3.	Normal labor: clinical evolution. Periods of labor. Mechanism of labor and delivery in anterior and posterior occipital presentation.	5
4.	Management of normal labor in the I, II and III stage. Partograph. Apgar score.	5
5.	Analgesia of labor. Indications, contraindications and complications.	5
6.	The puerperium and lactation. Management. Breastfeeding.	5
7.	Obstructed labor: feto-pelvic disproportion.	5
8.	Obstructed labor: pathology of uterine contractions.	5
9.	Multiple pregnancy. Antenatal care and management of labor and delivery.	5
10.	Monitoring of fetal well-being. Fetal growth restriction.	5
11.	Preterm labor and delivery. Principles of management. Prelabor rupture of membranes.	5
12.	Diagnosis and management of hemorrhages during pregnancy and delivery.	5
13.	Diagnosis and management of postpartum hemorrhages. Hemorrhagic shock. DIC syndrome.	5
14.	Hypertensive disorders during pregnancy. Nausea and vomiting of pregnancy.	5
15.	Postterm pregnancy. Induction of labor.	5
16.	Obstetrical trauma.	5
17.	Operative obstetrics. Cesarean section. Assisted vaginal delivery.	5
18.	Breach presentation. Management of pregnancy and labor. Transversal lay and deflected presentations.	5
19.	Thrombo-embolic complications in pregnancy and postpartum. Amniotic fluid embolism.	5
20.	Postpartum infections.	5

### **GYNECOLOGY:**

#### *A. Lectures:*

Nr.	Tema	Ore
1	Methods of examination of gynecologic patients. Family planning. Contraception.	2
2	Hypothalamus-pituitary-ovarian axis. Regulation of menstrual cycle. Dysfunctional uterine bleeding.	2
3	Amenorrhea.	2
4	Pediatric gynecology. Hirsute syndrome. Polycystic ovarian syndrome.	2
5	Sterility.	2
6	Pelvic inflammatory diseases. Sexually transmitted diseases.	2
7	Acute abdomen in gynecology.	2
8	Disturbances of pelvic support. Urinary incontinence. Endometriosis.	2
9	Precursors of cervical cancer. Cervical cancer. Screening and early diagnosis.	2
10	Uterine myoma. Benign and malign uterine pathology.	2



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### *B. Practical lessons:*

Nr.	Tema	Ore
1.	Symptoms of gynecologic diseases. Menstrual cycle disturbances. Dysfunctional uterine bleeding.	5
2.	Menstrual cycle disturbances. Amenorrhea. Premenstrual syndrome. Dysmenorrhea.	5
3.	Disturbances of sex differentiation. Congenital anomalies of the reproductive tract. Normal and pathological puberty.	5
4.	Menopause. Hormone replacement therapy.	5
5.	Pelvic inflammatory diseases. Sexually transmitted diseases. Infections of lower genital tract.	5
6.	Sterility. Investigation of sterile couple. Management. Assisted reproductive technologies.	5
7.	Family planning. Contraception. Abortion as a medico-social problem.	5
8.	Benign and malignant tumors of the ovary.	5
9.	Benign and malignant tumors of the uterus. Screening and diagnosis of breast and cervical cancer.	5
10.	Acute abdomen in gynecology. Operative gynecology. Mini-invasive gynecological surgery.	5

### **EMERGENCIES IN OBSTETRICS-GYNECOLOGY:**

#### *A. Lectures:*

Nr.	Tema	Ore
1	Obstetrical hemorrhages	2
2	Puerperal infections.	2
3	Hypertensive disorders of pregnancy. Preeclampsia. Eclampsia. Early and rare dysgravidias.	2
4	Acute abdomen in gynecology (abnormal uterine bleeding, intra-abdominal hemorrhages)	2
5	Acute abdomen in gynecology (pelvic inflammatory diseases, septic shock)	2

#### *B. Practical lessons:*

Nr.	Tema	Ore
1.	Obstetrical hemorrhages	5
2.	Puerperal infections.	5
3.	Hypertensive disorders of pregnancy. Preeclampsia. Eclampsia. Early and rare dysgravidias.	5
4.	Acute abdomen in gynecology (abnormal uterine bleeding, intra-abdominal hemorrhages)	5
5.	Acute abdomen in gynecology (pelvic inflammatory diseases, septic shock)	5



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### OPTIONAL COURSE ON FAMILY PLANNING:

#### A. Lectures:

Nr.	Tema	Ore
1	Regulation of menstrual cycle. Hirsute syndrome. Polycystic ovarian syndrome.	5
2	General aspects of family planning. Conception and contraception.	5
3	Non-hormonal contraception.	5
4	Hormonal contraception. Emergency contraception.	5
5	Abortion as a social and medical problem.	5
6	Surgical and medical abortion.	5
7	Sterility.	5

#### V. Recommended literature:

##### A. compulsory:

1. Neville J. Hacker, Joseph C. Gambone, Calvin J. Hobel. Hacker and Moore's Essentials of Obstetrics and Gynecology. 5-rd edition. Saunders Elsevier, 2010.
2. Jeremy Oats, Suzanne Abraham. Llewellyn-Jones Fundamentals of Obstetrics and Gynecology. 9-th edition. Elsevier Limited, 2010.
3. Williams Obstetrics. 20-th edition. Cunningham, MacDonald, Gant et al. Appleton and Lange, 2007.
4. Williams Gynecology. 2-d edition. Hoffman, Schorge, Schaffer, et al. Appleton and Lange, 2008.

##### B. additional:

1. "Current Obstetric and Gynecologic Diagnostics and Treatment" 2007. Edited by M.Pernol, R. Benson. APPLETON/LANGE. P. 1124.
2. Lawson J., Harrison K., Bergstrom S. Maternal Care in Developing Word. RCOG Press. 2001. p. 422.
3. Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice. IMPAC series. World Health Organization, Geneva, 2003.
4. Brian Magovan, Phillip Owen, James Drife. Clinical Obstetrics and Gynecology. Second edition. Elsevier Limited. 2010
5. Enkin M. et al. A guide to effective care in pregnancy and childbirth. Third edition. Oxford University Press. 2000.
6. Samantha M. Pfeifer. Obstetrics and Gynecology. National Medical Series for Independent Study. Sixth edition. Lippincott Williams and Wilkins, Walter Kluwer. 2008.

#### VI. Teaching and learning methods:

Lectures: PPT presentations.

Practical hours: presentations-discussions, clinical cases studies, solving clinical oriented problems, small groups work, role-play, clinical cases simulation, individual projects, application and interpretation of methods of examination, interactive method.

Main steps of teaching/learning based on clinical case are:

1. obtaining initial information
2. generation of initial clinical hypothesis



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3. review of important additional data to confirm initial hypothesis
4. selection of laboratory tests and elaboration of a plan of investigation to confirm diagnosis
5. formulation of presumptive or final diagnosis
6. elaboration of treatment plan
7. synthesis of all activities and identification of supplementary reading for better understanding of reviewed problem

Night duties are not mandatory, but constitute an excellent modality of learning that contribute substantially to development of clinical abilities, decision making, determination of clinical emergencies and development of feeling of responsibility. Students during night duties act under supervision of doctor on duty.

### ***VII. Suggestions for individual activity:***

If you want to have success in learning the discipline Obstetrics and Gynecology, you should work actively with the material:

1. Read the material carefully. Take notes. Try to formulate the main moments by yourself. Study the schedules and images from the manual. Answer the tests.
2. Attend courses and practical work. Consider carefully the material taught.
3. Ask questions teacher and colleagues.
4. Organize groups by 2 or 3 students to discuss course material and prepare for exams.
5. Come to night duties, this will help you more effectively assimilate theoretical material and will be an essential support for your medical practice.
6. Use the time reasonably.

### ***VIII. Methods of assessment***

**Formative evaluation:** during studies, responsible person assesses the progress made by student, his strength and weaknesses. Formative evaluation includes:

- Standardized written tests at the end of practical hours, that consist of 10 questions in different variants (single and multiple choice)
- Written tests

Final mark for semester is the average of marks obtained during semester. Students are informed about final mark during the last seminar.

Presence of students, recovery of absences and all the marks are recorded by the teacher in the register of the group, for each group separately. These registers are kept by the person responsible for the discipline.

**Final exam** is a standardized examination that includes: written test (single and multiple choices), practical examination and oral examination.

**Written test.** Each variant of tests consists of 100 questions from the material included in the syllabus of the discipline and according to unified bibliography of the discipline that is announced to students before each semester. First 40 questions are single choice, another 60 questions are multiple choice. There are two hours offered to students to solve the questions. All the students write the tests in the same conditions (same time interval). Written tests are marked from 0 to 10. Marks are announced to all students.

**Practical examination.** The general mark represents the average of three marks:



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- Clinical case (case is selected by chance). Student should learn the history, examine the patient, make presumptive diagnosis, elaborate the plan of investigation and treatment.
- Interpretation of the result of laboratory test / paraclinical examination (according to list of topics announced in advance) or of obstetrical or gynecological method of examination.

Examination is realized by the staff of the ob-gyn department. The student has 30 minutes for preparation for answer. The marks for practical exam vary from 0 till 10. The mark is announced to the student at the end of examination.

**Oral examination.** The student is offered 3 subjects (question card is selected by chance) from the topics included in the syllabus of the discipline and according to unified bibliography announced to students at the beginning of semester. He/she has 30 minutes for preparation for answer. The marks for oral exam vary from 0 to 10. The mark is announced to the student at the end of examination.

Subjects for exams are approved at the meeting of the Department and are offered to students no later than 30 days before session. To pass the exam, final mark should be minimum 5,1. Marks obtained at each examination are recorded in the register of the group, for each group separately. These registers are kept by the person responsible for the discipline.

### Methods of mark rounding

The average of current and final marks	Final mark
5	5
5,1-5,5	5,5
5,6-6,0	6
6,1-6,5	6,5
6,6-7,0	7
7,1-7,5	7,5
7,6-8,0	8
8,1-8,5	8,5
8,6-9,0	9
9,1-9,5	9,5
9,6-10	10

*Absence on examination without good reason is recorded as "absent" and is equivalent to 0 (zero). The student has the right to re-take the exam twice.*

### **Evaluation of teaching staff.**

At the end of each module, students are asked to fill in a questionnaire regarding the quality of teaching and the role of their teacher.

**IX. Language of study:** Romanian, Russian, English, French.