


Ministry of Science and Higher Education of the Russian Federation	The form	
F-Working program of discipline		



APPROVED  
 by the decision of the Academic Council of the Institute of  
 Medicine, Ecology and Physical Culture of the USU  
 dated April 12, 2023, protocol No. 8/2499  
 Chairman \_\_\_\_\_ /Midlenko V.I./

April 12, 2023

**WORKING PROGRAM OF THE DISCIPLINE**

Discipline	Modern problems of miscarriage
Faculty	Faculty of Medicine named after T.Z.Biktimirov IMEiFK UISU
department	Obstetrics and Gynecology
Well	V course

Direction (specialty) 31.05.01 General medicine \_ (specialty) \_\_\_\_\_

Qualification (degree) medical doctor

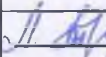
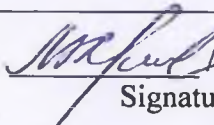
Full-time form of education \_\_\_\_\_


Date of introduction into the educational process of USU: "\_ 01 \_" September 2023

The program was updated at the meeting of the department: protocol No. 1 dated 30.08.2024 .  
 The program was updated at the meeting of the department: protocol No. \_ dated \_\_\_ 20 \_\_\_ .  
 The program was updated at the meeting of the department: protocol No. \_ dated \_\_\_ 20 \_\_\_ .  
 The program was updated at the meeting of the department: protocol No. \_ dated \_\_\_ 20 \_\_\_ .  
 The program was updated at the meeting of the department: protocol No. \_ dated \_\_\_ 20 \_\_\_ .

Developer info:

Full name	department	Job title, academic degree, title
Bogdasarov A.Yu.	Obstetrics and Gynecology	MD, Associate Professor of the Department

AGREED	AGREED
Head of the Department of Obstetrics and Gynecology, implementing discipline .	Head of the Graduating Department of Hospital Therapy
 / Trubnikova L.I./ Signature Full name April 12, 2023	 Wize-Khripunova M.A./ Signature Full name April 12, 2023

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## 1. GOALS AND TASKS OF MASTERING THE DISCIPLINE:

### Goals:

Training of qualified doctors to work in specialized centers for assisting pregnant women with fetal loss syndrome, early termination of pregnancy, premature newborns and prematurely born children of the first years of life.

### Tasks:

- to provide students with the acquisition of deeper knowledge about the etiology of miscarriage, physiology and endocrinology of preterm labor;
- to teach examination and treatment outside of pregnancy of women with a history of miscarriage;
- provide the most up-to-date information about the clinic, diagnosis, treatment of spontaneous abortions and preterm births;
- familiarize with the work of the perinatal center, modern perinatal technologies.

## 2. THE PLACE OF DISCIPLINE IN THE STRUCTURE OF OPOP VO:


Discipline B1.V.DV.04.01 "Modern problems of miscarriage" was developed in accordance with the requirements of the Federal State Educational Standard of Higher Education in the specialty 31.05.01 "General Medicine" No. 998 dated 12.08.2020, using the forms presented in the Documented procedure DP-2 "Design and development of basic educational programs of higher education (specialty) approved by the decision of the Academic Council of UISU on 06/23/2020. and the Curriculum for training specialists in the specialty 31.05.01 "General Medicine", approved by the rector of Ulyanovsk State University on 14.04.22.

Discipline B1.V.DV.04.01 "Modern problems of miscarriage" refers to a part of the disciplines formed by participants in educational relations; is an elective discipline.

To master this discipline, students must consolidate and master the knowledge, skills and competencies of the basic parts of the program (PC-3).

The discipline of choice "Modern problems of miscarriage" is preceded by propaedeutics of internal diseases, general surgery, dentistry, dermatovenereology, neurology, medical genetics, neurosurgery, occupational diseases, urology and andrology, otorhinolaryngology, pediatrics, ophthalmology, endocrinology, hospital surgery, pediatric surgery, polyclinic therapy, physiology, palliative medicine, diabetology and emergency endocrinology, radiation diagnostics, as well as various types of practices after 1-4 courses. Knowledge, skills and competencies in these disciplines are determined by the requirements for their development in the previous departments and are controlled by the definition of input knowledge in obstetrics and gynecology.

The elective discipline "Modern problems of miscarriage" is the previous section for the state final certification of students.

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### 3. LIST OF PLANNED LEARNING OUTCOMES IN THE DISCIPLINE RELATED TO THE PLANNED OUTCOMES OF THE EDUCATIONAL PROGRAM DEVELOPMENT:

As a result of studying the discipline, the student should form the following general professional and professional competencies:


Code and name implemented competencies	The list of planned learning outcomes in the discipline, correlated with indicators of the achievement of competencies
<b>PC-3</b> – Willingness to manage and treat patients with various nosological forms on an outpatient basis and in day hospital conditions	<p><b>ID-1pc3</b>  <b>Know:</b> Criteria for the diagnosis of the most common diseases of internal organs. Features of the organization and scope of work of an outpatient doctor, modern diagnostic capabilities of the outpatient service, methods for conducting emergency measures, indications for planned hospitalization; features of the treatment of diseases of internal organs in an outpatient setting, incl. day hospital conditions.</p> <p><b>ID-2pk3</b>            Be able to: formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic agents; to develop an algorithm for managing a patient with an obstetric and gynecological profile in a polyclinic.</p> <p><b>ID-3pk3</b>            Own: - an algorithm for determining the tactics of managing a patient with obstetric and gynecological pathology, conducting a differential diagnosis for obstetric and gynecological pathology;            - an algorithm for determining the tactics of managing a patient with obstetric and gynecological pathology, conducting a differential diagnosis for obstetric and gynecological pathology.</p>

#### 1. GENERAL DISCIPLINE LABOR:

**4.1. Volume of discipline in credit units (total): 2 credits**

**4.2. The volume of discipline by type of educational work (in hours):**

Type of study work	Number of hours (full-time form of study)			
	Total according to the plan	Incl. by semester		
		IX	X	XI
1	2	3	4	5
Contact work of students with a teacher in accordance with UE	54/0		54/0	
Auditory lessons:				

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• Lectures	-	-	
• seminars and workshops	54/54	54/54	
• laboratory work, workshops	-	-	
Independent work	18/18	18/18	
Form of current knowledge control and control independent work: testing, counter. work, colloquium, abstract, etc. (at least 2 types)	Testing colloquium	Testing colloquium	
Course work	-	-	
Types of intermediate certification (exam, test)	offset	offset	
Total hours per discipline	72	72	

\*If it is necessary to use partially/exclusively distance learning technologies in the educational process, the table, through a slash, indicates the number of hours the teaching staff work with students to conduct classes in a remote format using e-learning.

#### 4.3. The content of the discipline. Distribution of hours by topic and type of study:

Full-time form of education

Title and sections and topics	Total	Виды учебных занятий		
		Auditory lessons		Independent work
		Lectures	practical classes, seminar	
1	2	3	4	6
Section 1. Modern problems of miscarriage				
1. Etiology of miscarriage			6	
2. Endocrine and immune aspects of early pregnancy loss			6	3
3. Methods of examination and treatment outside of pregnancy of women with fetal loss syndrome			6	3
4. Risk factors and features of the clinical course of non-developing pregnancy, methods of diagnosis and treatment			6	3
5. Features of the clinic, diagnosis and treatment of preterm birth			6	
6. Modern methods for predicting preterm birth			6	

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7. Modern methods of diagnosis and treatment of isthmic-cervical insufficiency			6	3
8. Modern methods of diagnosis and treatment of isthmic-cervical insufficiency			6	3
9. Physiology and endocrinology of preterm labor			6	3
Total	72		54	18

## 5. CONTENT OF THE DISCIPLINE

### Section 1. Modern problems of miscarriage:

#### Topic 1. Etiology of miscarriage.

The etiology of miscarriage is extremely diverse and depends on many factors. Spontaneous miscarriage is often the result of not one, but several causes acting simultaneously or sequentially. Leading causes of miscarriage: genetic, endocrine, immunological, infectious, thrombophilic, uterine pathology (malformations, isthmic-cervical insufficiency, intrauterine synechia, uterine fibroids).

#### Topic 2. Endocrine and immune aspects of early pregnancy loss.

Most often, pregnancy loss in the first trimester is associated with an inferior luteal phase (NLF). To make this diagnosis, the clinic uses methods of functional diagnostics, determination of the preovulatory diameter of the follicle, endometrial biopsy on the 25-26th day of the menstrual cycle, determination of the level of progesterone in the middle of phase II of the cycle. In some cases, NLF is caused by damage or features of the receptor apparatus of the endometrium.

As a result of studies carried out in recent years, hormonal and immune interactions between the endometrium and trophoblast have been established. Progesterone plays a positive role in maintaining pregnancy: this is due to its immunomodulatory effect. Lymphocytoimmunotherapy as a treatment for the immunological aspects of miscarriage has been used since 1978.

In recent years, studies have appeared on the possibility of using immunoglobulin to reduce immunological imbalances.


#### Topic 3. Methods of examination and treatment outside of pregnancy of women with fetal loss syndrome.

Examination of women outside of pregnancy is necessary not only to understand the causes of the death of the embryo / fetus, but also to assess the state of the reproductive system of the spouses. It is necessary to examine all married couples after 2 losses, and women over 35 years old, both at will and after the first loss. An assessment of the reproductive system is also necessary for carrying out rehabilitation treatment and preventive measures in order to prepare for a subsequent pregnancy.

Taking into account the complex and polyetiological genesis of habitual pregnancy loss, preparation for pregnancy is necessary for successful therapy. Without preparation for pregnancy, despite all attempts to maintain, careful monitoring during pregnancy, successful completion of pregnancy is observed only in 62-67% of patients.

#### Topic 4. Risk factors and features of the clinical course of non-developing pregnancy, methods of diagnosis and treatment.

Non-developing pregnancy (missed pregnancy, missed miscarriage, missed abortion) means the death of the embryo (fetus) without clinical signs of miscarriage. The

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frequency of NB among cases of spontaneous miscarriages in early pregnancy is 10-20%. At the same time, in England the frequency of NB is 2.8%, and in the USA - 15%. The causes of missed pregnancy are numerous and often complex. In everyday practice, it is often difficult to establish a specific factor that led to this pathology. Ultrasound is used to diagnose NB. With its help, it is established that the pregnancy has frozen by the type of anembryony or by the type of death of the embryo / fetus. The basal temperature is consistently low (below 37), the level of hCG (in the urine) in all patients is also significantly below normal.

Due to the pathological inertia of the uterus, spontaneous miscarriage in women with a dead fetus is extremely rare. The regression of the contractile function of the myometrium in NB is most pronounced in the first three weeks of intrauterine retention of the fetal egg. Taking into account the possible complications caused by the long-term presence of the dead fetus (embryo) in the uterus, it is necessary immediately after ascertaining this pathology to start artificial interruption of NB. Methods for removing the fetal egg depend on the gestational age.

#### **Topic 5. Features of the clinic, diagnosis and treatment of preterm labor.**

The problem of protecting the health of mother and child is considered as an important component of health care, which is of paramount importance for the formation of a healthy generation of people from the earliest period of their lives. Premature birth is one of the most important issues of this problem. The relevance of preterm birth is due to the fact that they determine the level of perinatal morbidity and mortality. Perinatal mortality in premature newborns is 33 times higher than in full-term ones.

Currently, in the fight against threatening preterm birth, some success has been achieved due to the use in obstetric practice of drugs that suppress the contractile activity of the uterus. Tocolytics have received the greatest use in modern conditions. With the threat of preterm birth, an integral part of therapy is the prevention of respiratory distress syndrome in newborns by prescribing glucocorticoid drugs to the pregnant woman.

#### **Topic 6. Modern methods for predicting preterm birth.**

The process of activation of the contractile activity of the uterus, changes in the cervix and rupture of the membranes is a long process that begins long before the appearance of clinically significant manifestations and symptoms. This means that the diagnosis on clinical grounds is belated. The sensitivity of existing systems for assessing the risk of preterm birth is 40-60%, and their predictive value is 15-30%. In this regard, immunological and biochemical studies may be promising for early diagnosis and prognosis, allowing to identify changes in the fetoplacental system at the cellular and tissue levels.

#### **Topic 7. Thrombophilia and pregnancy.**


The state of the hemostasis system determines the course and outcome of pregnancy for the mother

### **TOPICS OF PRACTICAL AND SEMINAR LESSONS:**

#### **Section 1. Modern problems of miscarriage:**

##### **Topic 1. Etiology of miscarriage.**

Etiology of miscarriage. Socio-biological factors miscarriage. Medical factors of miscarriage. Leading causes of miscarriage: smoking, alcohol abuse, age of the pregnant woman, genetic, endocrine, immunological, infectious, thrombophilic, uterine pathology (malformations, isthmic-cervical insufficiency, intrauterine synechia, uterine fibroids).

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**Questions to the topic:**

- the most relevant socio-biological causes of miscarriage?
- name the main endocrine causes of spontaneous abortion?
- the role of thrombophilia in miscarriage?
- the role of the genetic factor in the development of preterm birth?
- Interrelation of endocrine and immune factors?

**Topic 2. Endocrine and immune aspects of early pregnancy loss.**

Inferior luteal phase (NLF): etiology, impact on pregnancy, diagnosis. Hormonal and immune interactions of the endometrium and trophoblast. The role of progesterone in maintaining pregnancy. Immunomodulatory action of progesterone.

**Questions to the topic:**

- NLF as a cause of miscarriage?
  - diagnosis of NLF?
  - the role of progesterone in the 2nd phase of the menstrual cycle?
- What is the immunomodulatory effect of progesterone?

**Topic 3. Methods of examination and treatment outside of pregnancy of women with fetal loss syndrome.**

Examination of women outside of pregnancy is necessary to understand the causes of embryo/fetal death. It is necessary to examine all married couples after 3 losses, and women over 35 years old, both at will and after the first loss. An assessment of the reproductive system is also necessary for carrying out rehabilitation treatment and preventive measures in order to prepare for a subsequent pregnancy.

**Questions to the topic:**

- What does the concept of "fetal loss syndrome" include?
- define habitual miscarriage?
- methods of examination and treatment outside of pregnancy of women with thyroid disease?
- method of examination and treatment outside of pregnancy of women with hyperprolactinemia?
- methods of examination and treatment outside of pregnancy of women with hyperandrogenism?
- methods of examination and treatment outside of pregnancy of women with uterine pathology?

**Topic 4. Risk factors and features of the clinical course of non-developing pregnancy, methods of diagnosis and treatment.**

Non-developing pregnancy (missed pregnancy, missed miscarriage, missed abortion) means the death of the embryo (fetus) without clinical signs of miscarriage. Causes of missed pregnancy. Diagnosis of non-developing pregnancy. Methods for removing the fetal egg.

**Questions to the topic:**

- the concept of "non-developing pregnancy" and its frequency in habitual miscarriage?
- Causes of missed pregnancy?
- diagnosis of non-developing pregnancy?
- methods for removing the fetal egg from the uterus?

**Topic 5. Features of the clinic, diagnosis and treatment of preterm labor.**

Preterm birth is one of the most important issues in maternal and child health. Perinatal mortality in premature newborns is 33 times higher than in full-term ones. The use in obstetric practice of drugs that suppress the contractile activity of the uterus (tocolytics).

Prevention of respiratory distress syndrome in premature newborns.

**Questions to the topic:**

- to define preterm birth?
- characterize a premature newborn?
- list the most common complications for the mother and fetus in preterm birth?
- features of the management of preterm labor?
- How to prevent fetal respiratory distress syndrome?

**Topic 6. Modern methods for predicting preterm birth.**

The process of activation of the contractile activity of the uterus, changes in the cervix and rupture of the membranes is a long process that begins long before the appearance of clinically significant manifestations and symptoms. Promising for early diagnosis and prognosis are immunological and biochemical studies that allow to identify changes in the fetoplacental system at the cellular and tissue levels.

**Questions to the topic:**

- immunological predictors of preterm birth (PIBF);
- biochemical precursors of preterm labor (spectrophotometry of blood serum)?
- determination of fibronectin - identification of the likelihood of preterm birth?

**Topic 7. Thrombophilia and pregnancy.**

Thrombophilic complications play an important role in recurrent miscarriage. Genetically determined forms of thrombophilia. The main forms of hereditary thrombophilias: deficiency of antithrombin, protein C and S, Leiden mutation of the gene V of the blood coagulation factor. Hereditary thrombophilic conditions. Basic principles of thrombophilia therapy.

**Questions to the topic:**

- Hereditary thrombophilia?
- Forms due to violations of vascular-platelet hemostasis?
- Metabolic forms of hyperhomocysteinemia?
- Acquired thrombophilia?
- Basic principles of thrombophilia therapy?

**Topic 8. Modern methods of diagnosis and treatment of isthmic-cervical insufficiency.**


Isthmic-cervical insufficiency (ICI) is a pathological condition of the isthmus and cervix, while they are not able to withstand intrauterine pressure and keep an increasing fetal egg in the uterine cavity until timely delivery. risk group. Functional ICI due to infantilism, hormonal and placental insufficiency. Monitoring the state of the cervix during pregnancy - transvaginal echographic examination. Methods of surgical treatment. Alternative treatments for CI.

**Questions to the topic:**

What are the causes of isthmic-cervical insufficiency?

- diagnostic criteria for CCI?
- the role of transvaginal ultrasound of the cervix in the diagnosis of CI?



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- methods of surgical correction of CI?
- obstetric pessaries as alternative treatments for CCI?

### **Topic 9. Physiology and endocrinology of preterm labor.**

The onset of childbirth in humans, as in other species of living beings, is stimulated by the fetus when it becomes mature enough to survive outside the womb. However, under certain circumstances, such a birth initiation mechanism can be detrimental to the health of the mother. In such cases, it would be advisable in the interests of the mother to resort to inducing premature delivery. Understanding the mechanisms that cause preterm birth should lead to better obstetric management.

#### **Questions to the topic:**

- physiology of uterine contractions?
  - features of premature induced labor?
  - what hormones are actively involved in the development of premature labor?
- Is it possible to stop preterm labor?

### **7. LABORATORY WORKS, WORKSHOP**


This type of work is not provided for by the UE.

### **8. TOPICS OF COURSE WORKS, CONTROL WORKS, SUMMARY**

This type of work is not provided for by the UE.

### **9. LIST OF QUESTIONS FOR OFFSET:**

1. The most relevant socio-biological causes of miscarriage?
2. What are the main endocrine causes of spontaneous abortion?
3. Role of thrombophilia in miscarriage?
4. The role of the genetic factor in the development of preterm labor?
5. Relationship between endocrine and immune factors?
6. NLF as a cause of miscarriage?
7. Diagnosis of NLF?
8. The role of progesterone in the 2nd phase of the menstrual cycle?
9. Immunomodulatory effect of progesterone?
10. What does the term "fetal loss syndrome" include?
11. Define recurrent miscarriage?
12. Methods of examination and treatment outside of pregnancy of women with thyroid diseases?
13. Method of examination and treatment outside of pregnancy of women with hyperprolactinemia?
14. Method of examination and treatment outside of pregnancy of women with hyperandrogenism?
15. Methods of examination and treatment outside of pregnancy of women with uterine pathology?
16. The concept of "non-developing pregnancy" and its frequency in recurrent miscarriage?
17. Causes of missed pregnancy?
18. Diagnosis of non-progressing pregnancy?
19. Methods for removing the fetal egg from the uterus?
20. Define preterm birth?
21. Describe a premature newborn?


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22. List the most common complications for mother and fetus in preterm birth?
23. Features of the management of preterm labor?
24. How to prevent fetal respiratory distress syndrome?
25. Immunological predictors of preterm birth (PIBF);
26. Biochemical precursors of preterm labor (spectrophotometry of blood serum)?
27. Determination of fibronectin - identification of the likelihood of preterm labor?
28. Hereditary thrombophilias?
29. Forms caused by disorders of vascular-platelet hemostasis?
30. Metabolic forms of hyperhomocysteinemia?
31. Acquired thrombophilia?
32. What are the main principles of thrombophilia therapy?
33. Causes of isthmic-cervical insufficiency?
34. Diagnostic criteria for CCI?
35. The role of transvaginal ultrasound of the cervix in the diagnosis of CCI?
36. Methods of surgical correction of CI?
37. Obstetric pessaries as alternative treatments for CCI?
38. Physiology of uterine contractions?
39. Features of premature induced labor?
40. What hormones are actively involved in the development of premature labor?
41. Is it possible to stop premature labor?

### 10. INDEPENDENT WORK OF STUDENTS:


Full-time form of education

№	Section, topic	Summary	Number of hours	form of control
1.	Endocrine and immune aspects of early pregnancy loss	Luteal phase insufficiency (NLF): methods of diagnosis and treatment. The role of the receptor apparatus of the endometrium in the development of NLF. The role of progesterone in maintaining pregnancy. Synthetic progestins and pregnancy. Lymphocytoimmunotherapy. Immunoglobulins in the treatment of recurrent miscarriage.	3	tests, questions
2.	Methods of examination and treatment outside of pregnancy of women with fetal loss syndrome	Definition of fetal loss syndrome. Purposeful collection of anamnesis: heredity, social conditions of family life, previous diseases, menstrual and reproductive functions. General examination of the patient: height, body weight, body type, severity of secondary sexual characteristics, the presence and nature of obesity, the presence of hirsutism and striae. Special research methods: hysteroscopy, functional diagnostic tests, hormonal, bacteriological and virological	3	tests, questions

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		studies outside of pregnancy, immunological and genetic examinations, ultrasound diagnostic methods. Treatment outside of pregnancy of women with endocrine causes of miscarriage. Treatment outside of pregnancy in women with chronic endometritis. Preparation for pregnancy of women with malformations of the uterus, with intrauterine synechia and with uterine fibroids.		
3.	Risk factors and features of the clinical course of non-developing pregnancy, methods of diagnosis and treatment	Terminology. Statistics. Trends. Reproductive health and behavior of women with non-developing pregnancy (NB). Etiological aspects of NB. Pathogenesis of NB, structural features of the fetoplacental system. Diagnosis of non-developing pregnancy. Treatment. Uterine emptying technique. early recovery. Prevention of repeated losses.	3	tests, questions
4.	Thrombophilia and pregnancy	hereditary thrombophilia. Forms caused by disorders of vascular-platelet hemostasis. Forms due to deficiency or anomalies of physiological anticoagulants. Forms associated with abnormalities of plasma coagulation factors. Forms associated with disorders of fibrinolysis. Metabolic forms of hyperhomocysteinemia. Acquired thrombophilia. Basic principles of thrombophilia therapy.	3	tests, questions
5.	Modern methods of diagnosis and treatment of isthmic-cervical insufficiency	Anatomical cause of miscarriage: isthmic-cervical insufficiency. Risk factors for isthmic-cervical insufficiency. Clinic, diagnosis of isthmic-cervical insufficiency. Methods of surgical correction of isthmic-cervical insufficiency and their effectiveness. Obstetric pessaries are an alternative to cervical sutures.	3	tests, questions
6.	Physiology and endocrinology of preterm labor.	Physiological aspects of the course of preterm labor. Endocrinology of preterm birth. Opportunities to prevent premature labor.	3	tests, questions

**11. EDUCATIONAL-METHODOLOGICAL AND INFORMATION SUPPORT OF THE DISCIPLINE:**

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## Application No. 1

### EDUCATIONAL-METHODICAL AND INFORMATION SUPPORT OF DISCIPLINE

#### a) List of recommended literature

##### Main literature:

1 Sidorova, I. S. Obstetrics and gynecology : Vol. 1. Physiological obstetrics : textbook / Sidorova I. S. , Nikitina N. A. - Москва : ГЭОТАР-Медиа, 2021. - 336 с. - ISBN 978-5-9704-6010-8. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970460108.html>

2 Sidorova, I. S. Obstetrics and gynecology : Vol. 4. Gynecology : textbook / Sidorova I. S. , Unanyan A. L. , Nikitina N. A. - Москва : ГЭОТАР-Медиа, 2021. - 192 с. - ISBN 978-5-9704-6013-9. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970460139.html>

##### Additional literature:

1. АндрееваМ. В. Diseases of the urinary tract, kidney and pregnancy = Заболеваниямочевыводящихпутей, почкибеременность : study guide / М. В. Андреева, Е. П. Шевцова, Ж. С. Мартинсон. - Волгоград :ВолгГМУ, 2021. - 88 с. - ISBN9785965206308. - Текст :электронный // ЭБС "Букап" : [сайт]. - URL : <https://www.books-up.ru/ru/book/diseases-of-the-urinary-tract-kidney-and-pregnancy-13816236/>

2. Instruction and methodological manual on physiological obstetrics / M. L. Albutova, N. V. Voznesenskaya, T. Yu. Kornilova [идр.] ; edited by L. I. Trubnikova ; Ulyanovsk State University, Faculty of Medicine, Departament of Obstetrics and Ginecolodgy. - 3rd edition. - Электрон. текстовыедан. (1 файл : 3,91 Мб). - Ulyanovsk: ULSU, 2018. - Загл. сэкрана. - Текст : электронный<http://lib.ulsu.ru/MegaPro/Download/MObject/1366>

3. Strizhakov, A. N. Methodologyandmethodsofeducationalobstetrichistorytaking :tutorialguide / A. N. Strizhakov, I. V. Ignatko, A. M. Rodionova [etal. ]. - Москва :ГЭОТАР-Медиа, 2022. - 80 с. - ISBN 978-5-9704-6449-6. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970464496.html>


##### Educational- methodical:

Kornilova T. Yu.Methodological instructions for independent work of students in the discipline «Modern problems of miscarriage» for the specialty 31.05.01 «Medical business» (IX-X semester) / Kornilova T. Yu., BogdasarovaA. Yu.; Ulyanovsk State University. - Ulyanovsk :UISU, 2022. - 6 p. - Неопубликованныйресурс; Наангл. яз. - URL: <http://lib.ulsu.ru/MegaPro/Download/MObject/12653>. - Режимдоступа: ЭБСУлГУ. - Текст :электронный.

##### AGREED:

*Leading specialist* Stadolnikova D.R., *Смел* / *2023*



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**a) Audiences for current control and intermediate certification, independent work of students:**

**In the maternity ward of the State Clinical Hospital No. one**

- professor's office - 14 m<sup>2</sup>
- training room №1 - 14 m<sup>2</sup>
- training room №2 - 12 m<sup>2</sup>
- training room №3 - 20 m<sup>2</sup>
- training room №4 - 35 m<sup>2</sup>
- training room №5 - 35 m<sup>2</sup>
- training room №6 - 40 m<sup>2</sup>
- Total: 150 m<sup>2</sup>

**In the maternity ward of the GUZ UCCH**

- training room №1 - 17 m<sup>2</sup>
- training room №2 - 30 m<sup>2</sup>
- professor's office - 30 m<sup>2</sup>
- laboratory - 34 m<sup>2</sup>
- conference hall - 42 m<sup>2</sup>

• Total: 153 m<sup>2</sup>

• Total: 303 m<sup>2</sup>

Students conduct independent work in the classrooms of the State Healthcare Institution of the City Clinical Hospital No. 1 and the State Health Institution of the Regional Clinical Hospital or in the library of the UISU (buildings 1 and 2)

**b) Tables:**


1. Hysterosalpingography.
2. Stages of development of the embryo.
3. Causes of miscarriage.
4. Stages of development of premature labor.
5. Surgical correction of isthmic-cervical insufficiency.
6. Pharmacokinetics of tocolytic drugs used to treat threatened miscarriage.

**c) Video films:**

1. Features of the course of preterm labor.
2. About methods of treatment of immunological causes of miscarriage (author V.M. Sidelnikova, 2008).
3. Guidelines for pregnant women.
4. Cesarean section with extraction of the fetus in the whole amniotic sac (author I.F. Fatkullin, 2010).


**d) Electronic presentations:**

1. Prediction of preterm birth.
2. Modern aspects of the treatment of miscarriage.
3. Risk factors and features of the clinical course of non-developing pregnancy.
4. Endocrinology of pregnancy.
5. Hormonal support for pregnancy in the first trimester.

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6. The health of the child is the health of both parents. **e) Equipment:**

1. Computers (2 pcs), laptop (1 pc), multimedia projector,
2. a set of obstetric instruments, phantoms, dolls,
3. Zoya Simulator Manikin (GD/F56 Highly Intelligent Digital Obstetrics & Gynecology Skills Simulator System (Computer Controlled) with Uterus Models and Newborn Manikin (Simulation Class),
4. Ultrasound apparatus "Aloka-500",
5. colposcope,
6. hysteroscope.

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### 13. SPECIAL CONDITIONS FOR STUDENTS WITH LIMITED HEALTH OPPORTUNITIES.

If necessary, students from among persons with disabilities (at the request of the student) may be offered one of the following options for perceiving information, taking into account their individual psychophysical characteristics:

for persons with visual impairments: in printed form in enlarged type; in the form of an electronic document; in the form of an audio file (translation of educational materials into audio format); in printed form in Braille; individual consultations with the involvement of a typhlo-sign language interpreter; individual assignments and consultations;


for persons with hearing impairments: in printed form; in the form of an electronic document; videos with subtitles; individual consultations with the involvement of a sign language interpreter; individual assignments and consultations;

for persons with disorders of the musculoskeletal system: in printed form; in the form of an electronic document; in the form of an audio file; individual assignments and consultations;

If it is necessary to use partially / exclusively distance learning technologies in the educational process, the organization of the work of teaching staff with students with disabilities and the disabled is provided in the electronic information and educational environment, taking into account their individual psychophysical characteristics.

Developer  Doctor of Medical Sciences, Professor of the Department  
Bogdasarov A.Yu.






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**LIST OF CHANGES of 1**

**Educational plan of discipline "Modern problems of miscarriage "**

**Speciality 31.05.01. «General medicine»**

<b>№</b>	<b>Content of the change or a link to the attached text of the</b>	<b>Full name of the head of the Department developing the discipline</b>	<b>Signature</b>	<b>Date</b>
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 1	<u>Trubnikova L.I.</u>		14.06.2024
2	Introduction of changes to item A) Recommended Literature item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 2	<u>Trubnikova L.I.</u>		14.06.2024

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## Appendix 1

### 11. EDUCATIONAL-METHODICAL AND INFORMATION SUPPORT OF DISCIPLINE

#### a) List of recommended literature

##### Main literature:

- 1 Sidorova, I. S. Obstetrics and gynecology : Vol. 1. Physiological obstetrics : textbook / Sidorova I. S. , Nikitina N. A. - Москва : ГЭОТАР-Медиа, 2021. - 336 с. - ISBN 978-5-9704-6010-8. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970460108.html>
- 2 Sidorova, I. S. Obstetrics and gynecology : Vol. 4. Gynecology : textbook / Sidorova I. S. , Unanyan A. L. , Nikitina N. A. - Москва : ГЭОТАР-Медиа, 2021. - 192 с. - ISBN 978-5-9704-6013-9. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970460139.html>

##### Additional literature:

- 1 Strizhakov, A. N. Methodology and methods of educational obstetric history taking : tutorial guide / A. N. Strizhakov, I. V. Ignatko, A. M. Rodionova [et al. ]. - Москва :ГЭОТАР-Медиа, 2022. - 80 с. - ISBN 978-5-9704-6449-6. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970464496.html>
2. Radzinskiy, V. E. (Радзинский В. Е. ) Gynecology : textbook / ed. by Radzinskiy V. E. , Fuks A. M. - Москва : ГЭОТАР-Медиа, 2020. - 896 с. - ISBN 978-5-9704-5799-3. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970457993.html>
3. Instruction and methodological manual on physiological obstetrics / M. L. Albutova, N. V. Voznesenskaya, T. Y. Kornilova [идр.] ; edited by L. I. Trubnikova ; Ulyanovsk State University, Faculty of Medicine, Department of Obstetrics and Gynecology. - 3rd edition. - Электрон. текстовые дан. (1 файл : 3,91 Мб). - Ulyanovsk: ULSU, 2018. - Загл. с экрана. - Текст :электронный <http://lib.ulsu.ru/MegaPro/Download/MObject/1366>

##### Educational- methodical:

Kornilova T. Yu. Methodological instructions for independent work of students in the discipline «Modern problems of miscarriage» for the specialty 31.05.01 «Medical business» (IX-X semester) / Kornilova T. Yu., Bogdasarova A. Yu.; Ulyanovsk State University. - Ulyanovsk : ULSU, 2022. - 6 p. - Неопубликованный ресурс; Наангл. яз. - URL: <http://lib.ulsu.ru/MegaPro/Download/MObject/12653>. - Режим доступа: ЭБСУЛГУ. - Текст :электронный.


##### AGREED:

Leading specialist Стадольникова/  24\_

The position of the worker scientific library Full name

signature

date

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## Appendix 2

### 1. *Electronic library systems:*

1.1. Цифровой образовательный ресурс IPRsmart : электронно-библиотечная система : сайт / ООО Компания «Ай Пи Ар Медиа». - Саратов, [2024]. – URL: <http://www.iprbookshop.ru>. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.2. Образовательная платформа ЮРАЙТ : образовательный ресурс, электронная библиотека : сайт / ООО Электронное издательство «ЮРАЙТ». – Москва, [2024]. - URL: <https://urait.ru> . – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.3. База данных «Электронная библиотека технического ВУЗа (ЭБС «Консультант студента») : электронно-библиотечная система : сайт / ООО «Политехресурс». – Москва, [2024]. – URL: <https://www.studentlibrary.ru/cgi-bin/mb4x>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.4. Консультант врача. Электронная медицинская библиотека : база данных : сайт / ООО «Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг». – Москва, [2024]. – URL: <https://www.rosmedlib.ru>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.5. Большая медицинская библиотека : электронно-библиотечная система : сайт / ООО «Букап». – Томск, [2024]. – URL: <https://www.books-up.ru/ru/library/> . – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.6. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС «Лань». – Санкт-Петербург, [2024]. – URL: <https://e.lanbook.com>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.7. ЭБС Znanium.com : электронно-библиотечная система : сайт / ООО «Знаниум». - Москва, [2024]. - URL: <http://znanium.com> . – Режим доступа : для зарегистрир. пользователей. - Текст : электронный.

2. **КонсультантПлюс** [Электронный ресурс]: справочная правовая система. / ООО «Консультант Плюс» - Электрон. дан. - Москва : КонсультантПлюс, [2024].

3. **eLIBRARY.RU**: научная электронная библиотека : сайт / ООО «Научная Электронная Библиотека». – Москва, [2024]. – URL: <http://elibrary.ru>. – Режим доступа : для авториз. пользователей. – Текст : электронный

4. **Федеральная государственная информационная система «Национальная электронная библиотека»** : электронная библиотека : сайт / ФГБУ РГБ. – Москва, [2024]. – URL: <https://нэб.рф>. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

5. **Российское образование** : федеральный портал / учредитель ФГАУ «ФИЦТО». – URL: <http://www.edu.ru>. – Текст : электронный.

6. **Электронная библиотечная система УлГУ** : модуль «Электронная библиотека» АБИС Мега-ПРО / ООО «Дата Экспресс». – URL: <http://lib.ulsu.ru/MegaPro/Web>. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.