

INSTITUTE OF ENGINEERING PHYSICS FOR BIOMEDICINE

APPROVED ИТС ИФИБ

Protocol No. 3.1

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ACADEMIC COURSE OUTLINE

АКУШЕРСТВО И ПЕРИНАТОЛОГИЯ / OBSTETRICS AND PERINATOLOGY

Educational program track (speciality) [1] 31.05.01 General Medicine

Semester	Labour input, credits	Total course academic, hours	Lectures, hrs.	Practical sessions, hrs.	Laboratory sessions, hrs.	In the form of practical studies, hrs.	Independent studies, hrs.	Independent studies monitoring, hrs.	Course progress, Exam/Pass-fail exam/Term
8	3	108	20	40	0		48	0	PFE
Total	3	108	20	40	0	40	48	0	

ABSTRACT

The discipline program is based on the requirements for the results of mastering the specialist program. The graduate (General practitioner) must be ready to solve the problem of providing maternity care and monitoring the course of physiological pregnancy. During the course of the discipline, students learn about the organization of the obstetric and gynecological service, the maternity and childhood service, and the accounting and reporting documentation of the obstetric hospital and women's consultation. The continuity of acquiring knowledge and obstetric skills is achieved through practical training in the real conditions of the obstetric hospital.

1. ACADEMIC COURSE GOALS AND OBJECTIVES

The purpose of studying this discipline is to develop competencies in the field of obstetrics and perinatology, taking into account further education and professional activities in the field of specialty «General Medicine».

Objectives of the discipline:

1. To provide students with basic knowledge of the clinical and physiological characteristics of the female reproductive system, the processes occurring in a woman's body during a normal pregnancy, the process of normal childbirth, and the physiological postpartum period, as well as the basic and additional methods of examination of pregnant women, women in labor, and women after childbirth.

2. To prepare students to provide emergency obstetric care in typical and urgent obstetric situations.

3. To provide students with basic knowledge of the anatomical and histological features of fetal and neonatal development, as well as the clinical and physiological processes occurring in the child's body during the early and late neonatal period.

4. To teach students how to perform additional research methods used in obstetrics and perinatology and interpret the results obtained.

5. To cover the main issues related to the use of modern contraceptive methods and the prevention of abortions.

2. PLACE OF THE ACADEMIC COURSE IN THE MAIN HIGHER EDUCATION CURRICULUM

The discipline is part of the educational program that is formed by the participants in educational relations. It is a clinical discipline that contributes to the formation of professional competencies by supplementing and deepening the knowledge, skills, and abilities acquired through the study of other clinical disciplines.

The study of the discipline is based on the knowledge, skills, and abilities acquired during the study of such disciplines as normal and pathological anatomy, normal and pathological physiology, cytology and embryology, topographic anatomy and operative surgery, medical microbiology and virology, immunology, pharmacology, propaedeutics of internal diseases, radiation diagnostics, general surgery, and obstetrics.

The knowledge, skills, and abilities acquired as a result of studying this discipline are necessary for the subsequent successful study of such disciplines as gynecology, pediatric diseases, outpatient

therapy, internal diseases, surgical diseases, obstetric and gynecological practice, outpatient practice, and other clinical disciplines.

3. DEVELOPED COMPETENCIES AND INTENDED LEARNING OUTCOMES

Universal and/or general professional competencies:

Competency code and title	Code and title of competency-based rubrics
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Professional competencies in compliance with the goals and professional knowledge areas:

Professional activity goal	Professional activity knowledge area	Professional competency code and title; Based on the professional standard, experience analysis	Code and title of competency-based rubrics
medical			
Diagnostics of diseases and pathological conditions of the patients.	Individuals (patients); the population; the set of means and technologies aimed at creating conditions for preserving and strengthening the health of the adult population	<p>PIK-3.2 [1] - Capable of conducting patient examinations to establish a diagnosis</p> <p><i>The base:</i> Professional standard: 02.009</p>	<p>3-PIK-3.2[1] - Know: - clinical diagnosis establishment algorithm; - patient history-taking and physical examination methodology; - laboratory and instrumental research methods for health assessment to establish a diagnosis; - semiotics of diseases of different organs and systems; - structure, principles of the current International Statistical Classification of Diseases and Related Health Problems (hereinafter - ICD).;</p> <p>Y-PIK-3.2[1] - Be able to: - conduct patient history-taking and physical examination; - interpret history, physical examination data, laboratory and instrumental results to recognize a condition or establish the presence/absence of a disease, establish a diagnosis; - distinguish and recognize in each specific case tissue damage, the</p>

			<p>reaction to it, and the form of adaptability; - develop a patient examination plan, justify the necessity and scope of laboratory and instrumental examination; - identify main pathological conditions, symptoms and syndromes, nosological forms in the patient according to the current ICD.;</p> <p>B-IIK-3.2[1] - Possess skills in: - patient history-taking and physical examination; Formulating a preliminary diagnosis; - developing a patient examination plan; Interpreting laboratory and instrumental results; - establishing a diagnosis considering the current ICD</p>
<p>Providing primary medical care in outpatient settings and day hospital settings.</p>	<p>Individuals (patients); the population; the set of means and technologies aimed at creating conditions for preserving and strengthening the health of the adult population</p>	<p>IIK-3.3 [1] - Able to provide primary medical care in an outpatient setting</p> <p><i>The base:</i> Professional standard: 02.009</p>	<p>3-IIK-3.3[1] - Know: - general issues of organizing medical care for the population and organizing medical care for the adult population in outpatient settings, including at home; - features of medical care using telemedicine technologies; - Clinical picture, differential diagnosis, features of the course of the disease, complications and outcomes of internal diseases; - diagnostic criteria for the most common diseases of internal organs and systems; - indications for referring patients for specialist consultations according to clinical guidelines and considering relevant medical care standards; - indications for referring patients for</p>

			<p>specialized medical care in inpatient settings and day hospitals according to clinical guidelines and considering relevant medical care standards; - features of managing and treating elderly patients in outpatient settings. ;</p> <p>Y-IIIK-3.3[1] - Be able to: - perform differential diagnosis of internal diseases; - monitor the course of physiological pregnancy; - justify the need for referring patients to specialist consultations; - recognize the main and concomitant diseases; - assess disease or condition severity - the degree of organ and/or system damage or functional impairment due to the disease/condition or its complications; - determine management, examination and treatment tactics for patients with specific diseases (nosological units) depending on disease severity and condition, according to clinical guidelines and considering relevant medical care standards.;</p> <p>B-IIIK-3.3[1] - Possess skills in: - conducting differential diagnosis with other diseases/conditions, including emergencies; - interpreting data obtained from patient consultations with specialists; - prescribing additional tests to clarify the diagnosis; - formulating a clinical diagnosis; - prescribing treatment according to clinical guidelines and considering relevant medical care standards.</p>
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4. PEDAGOGIC POTENTIAL OF THE COURSE

Pedagogic tracks/objectives	Pedagogic goals (code)
Professional education	Establishing conditions for: formation of responsibility for professional choice, professional development and professional decisions (B18)
Professional education	Establishing conditions for: formation of motivation to improve the quality of medical care to the population and the desire to follow the rules and norms of interaction between the doctor, colleagues and the patient, contributing to the creation of the most favorable environment for the patient's recovery (B34)

5. ACADEMIC COURSE STRUCTURE AND CONTENT

Academic course sections, their scope, terms of study and assessment:

No.	Academic course section name	Weeks	Lectures/ Practical (seminars)/ Laboratory sessions, hrs.	Compulsory current assessment (form *, week)	Maximum grade per section**	Section assessment (form *, week)	Competency-based rubrics
	<i>8 Semester</i>						
1	Perinatology. Anatomy and Physiology of Pregnancy	1-8	10/20/0	TstP-8 (25)	25	SA-8	3-ПК-3.2, Y-ПК-3.2, B-ПК-3.2, 3-ПК-3.3, Y-ПК-3.3, B-ПК-3.3
2	Complications of pregnancy and childbirth	9-15	10/20/0	TstP-15 (25)	25	SA-15	3-ПК-3.2, Y-ПК-3.2, B-ПК-3.2, 3-ПК-3.3, Y-ПК-3.3, B-ПК-3.3
	<i>Totals for 8 Semester</i>		20/40/0		50		
	Assessment events for 8 Semester				50	PFE	3-ПК-3.2, Y-ПК-3.2, B-ПК-3.2, 3-ПК-3.3, Y-ПК-3.3, B-ПК-3.3

* – abbreviated name of assessment

** – 100 maximum points per semester including a pass/fail exam and (or) an exam

Abbreviated current assessment forms and section assessment

Abbreviation	Full name
SA	Summative assessment
TstP	Test paper
PFE	Pass/fail examination

SYLLABUS

Weeks	Topics / Content	Lect., hrs.	Pr./sem., hrs.	Lab., hrs.
	<i>8 Semester</i>	20	40	0
1-8	Perinatology. Anatomy and Physiology of Pregnancy	10	20	0
1	Perinatology. Embryogenesis. Anatomical and physiological features of the fetus Perinatology as a specific branch of science. Fertilization. Stages of development of the ovum. The fetus as an object of childbirth. Methods of assessing the intrauterine condition of the fetus. Structure and functions of the placenta, amniotic membranes, and amniotic fluid. Classification of teratogenic and embryotoxic factors. Their influence on the growth and development of the fetus	All		
		1	2	0
		Online		
		0	0	0
2	Physiology of pregnancy. Diagnosis of pregnancy Physiological changes in a woman's body during pregnancy. Characteristics of changes in the uterus, ovaries, and other parts of the reproductive system. Changes in the mammary glands during pregnancy and the postpartum period. Dubious, probable and reliable signs of pregnancy. Methods of external and internal obstetric examination. Instrumental methods of examination during pregnancy.	All		
		1	2	0
		Online		
		0	0	0
3	Anatomical and physiological features of the newborn Anatomical and physiological features of the newborn's body structure, nervous and muscular systems. Physiological features of the respiratory and nervous systems. Newborn reflexes. The Apgar scale	All		
		1	2	0
		Online		
		0	0	0
4	Early neonatal adaptation. Assessment of the newborn's condition Stages of the early neonatal period of the greatest tension of adaptive reactions. Characteristics of the periods. Transitional states of the newborn (borderline, transient, physiological). The Apgar scale	All		
		1	2	0
		Online		
		0	0	0
5	Fetal growth restriction Definition. Severity of perinatal development delay. Etiology. Diagnosis. Treatment.	All		
		1	2	0
		Online		
		0	0	0
6	Fetal hypoxia and newborn asphyxia Classification of fetal hypoxia: acute, chronic, causes of hypoxia, pathogenesis of hypoxia, methods of diagnosing the condition of the intrauterine fetus. Possible complications of fetal hypoxia, intracranial birth trauma, newborn asphyxia.	All		
		1	2	0
		Online		
		0	0	0

	Treatment methods. Respiratory distress syndrome of newborns. Classification. Clinic. Resuscitation measures. Treatment of posthypoxic syndrome.			
7	In-utero infection In-utero infection Definition. Classification of groups of pathogens of in-utero infection. Ways of infection and complications of in-utero infection. Clinic. Diagnostics. Treatment	All		
		2	4	0
		Online		
		0	0	0
8	Hereditary diseases and congenital malformations. Classification. Etiology. Clinic. Modern methods of diagnostics of congenital malformations. Treatment. Prevention. Preconception genetic screening. Prenatal genetic testing.	All		
		2	4	0
		Online		
		0	0	0
9-15	Complications of pregnancy and childbirth	10	20	0
9	Miscarriage Spontaneous abortion. Etiology, pathogenesis, classification, clinic, diagnostics, therapy and prevention. Habitual miscarriage. Etiology, treatment, prevention	All		
		1	2	0
		Online		
		0	0	0
10	Premature birth Premature birth. Classification. Etiology, management of premature birth, prevention, features of management of premature newborns.	All		
		1	2	0
		Online		
		0	0	0
11	Overdue pregnancy and delayed labor. Features of the condition of newborns in overdue pregnancy Overdue pregnancy. Causes, Complications. Forecast for labor. Management tactics of delayed labor in overdue pregnancy. Features of the condition of newborns in overdue pregnancy and delayed labor.	All		
		1	2	0
		Online		
		0	0	0
12	Abnormalities of labor activity Abnormalities of labor activity. Classification. Weakness of labor activity (primary and secondary). Etiology, clinic, diagnostics and therapy of weakness of labor activity. Modern methods of diagnostics of abnormalities of labor activity. Rapid labor. The course of labor in primiparous women over 30 years of age. Physiological features of the newborn in rapid labor.	All		
		1	2	0
		Online		
		0	0	0
13	Hemolytic disease of the fetus and newborn. Etiology. Pathogenesis. Classification. Clinic, diagnostics, treatment. Specific and non-specific prevention of hemolytic disease of the fetus and newborn	All		
		2	4	0
		Online		
		0	0	0
14	Early and late toxicoses Modern ideas about the etiology and pathogenesis of early and late toxicoses. Classification of toxicoses of the first half of pregnancy. Clinic, diagnostics and treatment. Rare forms of toxicoses. Preeclampsia. Classification. Clinic and diagnostics of preeclampsia. Modern methods of treatment of preeclampsia. Prevention of preeclampsia. Eclampsia. Clinic, diagnostics, basic resuscitation measures. Prevention of preeclampsia. Identification of risk groups for the development of preeclampsia	All		
		2	4	0
		Online		
		0	0	0
15	Birth trauma of the mother and the fetus	All		

<p>Birth trauma of the mother and the fetus. Uterine ruptures. Mechanisms of occurrence and classification, spontaneous and forced ruptures. Complete and incomplete, features of uterine ruptures along the scar. Assessment of the fullness of the scar on the uterus. Clinical picture of threatening, beginning and accomplished uterine rupture. Diagnosis, treatment and prevention of birth trauma of the mother. Classification of birth trauma of the fetus. Clinic. Diagnostics. Treatment. Prevention. Features of managing newborns after birth trauma</p>	2	4	0
	Online		
	0	0	0

Abbreviated names of online options:

Abbreviation	Full name
EC	E-course
FtM	Full-text material
FtL	Full-text lectures
VM	Video materials
AM	Audio materials
Prs	Presentations
T	Tests
ERM	E-reference materials
IS	Interactive site

PRACTICAL SESSIONS TOPICS

Weeks	Topics / Content
	<i>8 Semester</i>
1 - 2	<p>Perinatology. Embryogenesis. Anatomical and physiological features of the fetus Perinatology as a specific branch of science. Study of the stages of fertilization. Stages of development of the ovum. The fetus as an object of childbirth. Methods of assessing the anthropometric indicators of the fetus. Methods of assessing the intrauterine condition of the fetus. Structure and functions of the placenta, amniotic membranes, and amniotic fluid. Classification of teratogenic and embryotoxic factors. Their influence on the growth and development of the fetus</p>
3 - 4	<p>Physiology of pregnancy. Diagnosis of pregnancy. Anatomical and physiological features of the newborn. Early neonatal adaptation. Assessment of the newborn's condition Study of physiological changes in a woman's body during pregnancy. Characteristics of changes in the uterus, ovaries, and other parts of the reproductive system. Changes in the mammary glands during pregnancy and the postpartum period. Dubious, probable and reliable signs of pregnancy. Methods of external and internal obstetric examination. Instrumental methods of examination during pregnancy. Structure and function of the placenta, amniotic fluid, and membranes. Methods of calculating the gestational age and due date. Instrumental methods of pregnancy diagnosis. Anatomical and physiological features of the newborn's body structure, nervous system, and muscular system. Physiological features of the respiratory and nervous systems. Newborn reflexes. The Apgar scale. Stages of the early neonatal period of the greatest stress on adaptive reactions. Characteristics of the periods. Transitional states of the newborn (borderline, transient, and physiological).</p>
5 - 6	<p>Fetal growth restriction (FGR). Fetal hypoxia and newborn asphyxia Definition of FGR . Severity of perinatal development delay. Etiology. Diagnosis. Treatment.</p>

	Classification of fetal hypoxia: acute, chronic, causes of hypoxia, pathogenesis of hypoxia, methods of diagnosing the condition of the intrauterine fetus. Possible complications of fetal hypoxia, intracranial birth trauma, and newborn asphyxia. Treatment methods. Respiratory distress syndrome in newborns. Classification. Clinic. Study the complex of resuscitation measures for newborn asphyxia. Treatment of posthypoxic syndrome
7 - 8	Intrauterine infection. Hereditary diseases and congenital malformations. Study of the basic protocol for childbirth. Biomechanism of childbirth in occipital and breech presentation. Physiology of the postpartum period. Signs of full-term newborns.
9 - 10	Miscarriage, overdue pregnancy and delayed labor. Premature labor. Abnormal labor activity Etiology, pathogenesis, clinic, diagnostics, treatment, prevention of miscarriage and overdue pregnancy. Premature labor. Obstetric tactics in premature labor. Physiological features of newborns in premature and delayed labor, in overdue pregnancy
11 - 12	Early and late toxicosis Classification of early and late toxicosis of pregnancy. Clinic, diagnostics, treatment, prevention. Classification of early and late toxicosis of pregnancy. Clinic, diagnostics, treatment, prevention. Etiology, pathogenesis, classification, clinic, diagnostics, treatment of hemolytic disease of the fetus and newborn. Methods of specific and non-specific prevention of hemolytic disease of the fetus and newborn.
13 - 15	Birth trauma of the mother and the fetus. Uterine ruptures. Mechanisms of occurrence and classification, spontaneous and forced ruptures. Complete and incomplete, features of uterine ruptures along the scar. Methods of assessing the fullness of the scar on the uterus. Clinical picture of threatening, beginning and accomplished uterine rupture. Diagnosis, treatment and prevention of birth trauma of the mother. Classification of birth trauma of the fetus. Clinic. Diagnosis. Treatment. Prevention. Features of managing newborns after birth trauma.

6. EDUCATIONAL TECHNOLOGIES

To master the discipline by students and implement the competence-based approach in the educational process, active and interactive forms of conducting classes (lectures, clinical (practical) classes, business games on the subject of classes, analysis of specific clinical situations) are used in order to form and develop professional skills of students. It is provided for the mandatory participation of students in clinical and scientific-practical conferences, clinical consiliums. Independent study of the recommended additional literature is practiced, computer test control of students' knowledge is carried out. Mastering of practical skills is provided, including in simulated conditions.

7. ASSESSMENT TOOLKIT

The assessment toolkit ensures verification of the intended learning outcomes achievement (competency-based rubrics) using current, midterm and interim assessment of the course.

The link between developed competencies and their assessment is presented in the following table:

Competency	Achievement rubrics	Assessment activity (Syl 1)
ПК-3.2	3-ПК-3.2	PFE, SA-8, SA-15, к.р-8, к.р-15
	У-ПК-3.2	PFE, SA-8, SA-15, к.р-8, к.р-

		15
	B-ΠΚ-3.2	PFE, SA-8, SA-15, κ.ρ-8, κ.ρ-15
ΠΚ-3.3	3-ΠΚ-3.3	PFE, SA-8, SA-15, κ.ρ-8, κ.ρ-15
	Υ-ΠΚ-3.3	PFE, SA-8, SA-15, κ.ρ-8, κ.ρ-15
	B-ΠΚ-3.3	PFE, SA-8, SA-15, κ.ρ-8, κ.ρ-15

Educational achievement rubrics scales

The scale of each assessment activity varies from 0 to the maximum established point, inclusive. The final assessment of the course is performed on a 100-point scale and represents the sum of the points earned by the student in the section assessments, framework of current and interim assessment.

Sections and interim assessments are considered passed when the student achieves a minimum score equal to 60% of the maximum. The final grade is assigned only upon passing all sections and the interim assessment.

The final grade is assigned in accordance with the following scale:

Total score	Rating on a 4-point scale	Pass/fail examination	ECTS assessment
90-100	5 – « <i>excellent</i> »	« <i>pass</i> »	A
85-89	4 – « <i>good</i> »		B
75-84			C
70-74			D
65-69	3 – « <i>satisfactory</i> »		E
60-64			F
below 60	2 – « <i>fail</i> »	« <i>fail</i> »	

An “excellent” grade indicates a deep and solid mastery of the program material by a student who presents their answers consistently, clearly, and logically, is able to closely link theory with practice, and uses materials from monographic literature in their answers.

A “good” grade corresponds to a student’s solid knowledge of the material, who presents their answers competently and to the point, without any significant inaccuracies.

A “satisfactory” grade corresponds to the basic level of mastery of the material by the student, in which the main material has been mastered, but its details have not been assimilated, the answers contain inaccuracies, insufficiently correct wording and logical inconsistencies.

A grade “pass” corresponds to at least a basic level of mastery of the program material, in which the student possesses the necessary knowledge, skills, and abilities, and is able to apply theoretical principles to solve typical practical problems.

A grade “fail” is given to a student who lacks a significant understanding of the curriculum material, makes significant errors in their answers, or fails all required assignments. These students are generally unable to continue their studies without additional classes.

8. ACADEMIC COURSE EDUCATIONAL, METHODOLOGICAL AND INFORMATIONAL SUPPORT

CORE READING:

1. ЭИ R13 Obstetrics : Рекомендовано ГБОУ ВПО "Первый Московский государственный медицинский университет имени И.М. Сеченова" в качестве учебника для студентов образовательных учреждений высшего профессионального образования, обучающихся по направлению подготовки "Лечебное дело" по разделу дисциплины "Акушерство и гинекология", Fuks A.M., Gagaev Ch.G., Radzinskiy V.E., Москва: ГЭОТАР-Медиа, 2018
2. ЭИ S34 Obstetrics and gynecology : Vol. 1. Physiological obstetrics : учебное пособие, Sidorova I.S., Nikitina N., Москва: ГЭОТАР-Медиа, 2021
3. ЭИ S34 Obstetrics and gynecology : Vol. 3 : учебник, Nikitina N.A., Sidorova I.S., Москва: ГЭОТАР-Медиа, 2021
4. ЭИ S57 Obstetrics and gynecology: Vol. 2. Obstetric pathology : учебник, Sidorova I.S., Nikitina N., Москва: ГЭОТАР-Медиа, 2021

FURTHER READING:

1. ЭИ S34 Obstetrics and gynecology: Vol. 4. Gynecology : учебник, Unanyan A., Sidorova I.S., Nikitina N., Москва: ГЭОТАР-Медиа, 2021
2. ЭИ O-17 Obstetrics in Family Medicine : A Practical Guide, , Totowa, NJ: Humana Press., 2006
3. ЭИ S20 Primary Care in Obstetrics and Gynecology : A Handbook for Clinicians, Smith, Roger P. , Sanfilippo, Joseph S. , New York, NY: Springer New York., 2007
4. ЭИ P92 Principles of Critical Care in Obstetrics : Volume I, , New Delhi: Springer India, 2016

SOFTWARE:

No special softwares is required

LMS AND ONLINE RESOURCES

1. Anatomical Dictionary (<https://www.memorixanatomy.com/dictionary>)
2. Электронная библиотека студента (www.studentlibrary.ru)

<https://online.mephi.ru/>

<http://library.mephi.ru/>

9. LOGISTICAL SUPPORT

1. Персональный компьютер: Процессор CPU Intel Core i7-8700 (3.2GHz/12MB/6 cores)
Материнская плата Gig (Клиническая база)
2. Мышь, клавиатура (Клиническая база)
3. Проектор SMART P109 (Клиническая база)
4. Веб-камера Microsoft LifeCam Cinema HD (Клиническая база)
5. Монитор (Клиническая база)
6. Кушетка смотровая (Клиническая база)
7. Иное оснащение, предусмотренное порядками оказания медицинской помощи по соответствующему профилю (Клиническая база)
8. Тазомер акушерский металлический ТА-М-МИЗ (64-401)
9. Акушерский тренажер (Nasco) NS.110.180 (64-302)

10. EDUCATIONAL AND METHODOLOGICAL RECOMMENDATIONS FOR STUDENTS

Lecture:

Writing a lecture note: briefly, schematically, consistently record the main points, conclusions, formulations, generalizations; mark important thoughts, highlight keywords, terms. Checking terms, concepts using encyclopedias, dictionaries, reference books with writing out interpretations in a notebook. Designate questions, terms, material that causes difficulties, mark and try to find the answer in the recommended literature. If it is not possible to understand the material on your own, it is necessary to formulate a question and ask the teacher at a consultation, at a practical lesson.

Independent work:

Each student must individually prepare on the discipline topics, reading lecture notes and recommended literature. Independent work allows the student in a quiet environment to think, deal with information on the topic, if necessary, refer to reference literature. Careful reading and repetition of what has been read helps to fully master the content of the topic, to structure knowledge.

In order to ensure that the content of the discipline is remembered for a long time, it is advisable to study it in stages, by topic and in a strict sequence, as subsequent topics usually build on previous ones. This is why most of the independent work involves preparing for seminars, completing recommended tasks, preparing for colloquiums, completing and defending individual homework assignments, and preparing for laboratory work. To successfully complete these tasks, each student has access to the department's methodological support.

It is best for students to plan the time they will need for independent study of this discipline for the entire semester, with regular review of the material. The material covered in lectures should be regularly supplemented with information from the literature sources listed in the course syllabus. For each of the topics for independent study listed in the course syllabus, students should first read the recommended literature and, if necessary, create a brief summary of the main concepts, terms, and

information that needs to be memorized and is essential for understanding the topic and progressing through the course. It is recommended to use Internet resources to expand knowledge in the discipline.

When working independently, it is recommended to make notes on the material being studied (worked on). The notes can be basic, containing only the main key points, but still sufficient to provide a complete answer to the question. The notes can also be detailed. The length of the notes is determined by the student themselves.

When working with academic or scientific literature, it is recommended that the student make notes as they read, either in the form of a simple or detailed outline, or by writing down the main points and preparing summaries of what they have read. These notes can earn additional points for active participation.

Clinical practical classes

The most important stage of a practical class is the independent work of students to master practical skills: in simulated conditions, at the patient's bedside, in the functional diagnostics room, etc. Depending on the specific topic of the class, the student independently (or under the supervision of the teacher) asks the patient, conducts a clinical examination, attends an instrumental diagnosis, and studies the results of additional tests, summarizes the data, presents it in the form of fragments of the patient's medical history, and reports the results to the teacher. The achievements are evaluated individually for each student, the degree of formation of practical skills and their theoretical basis.

Clinical case reviews of thematic patients are conducted for the entire group or by students participating in clinical case reviews and periodic scientific and practical conferences in medical organizations where practical training takes place. During the reviews, the teacher evaluates the active participation of each student and their ability to think clinically.

The teacher presents situational tasks that develop clinical thinking and require students to use their knowledge from various subjects in their field.

Active and interactive forms of teaching are widely used in the educational process (work in small groups, activation of creative activity, use of computer training programs, and a conference-style lesson).

The teacher controls the students' independent work, preparation of essays, research work of students, work with patients in collaboration with the teacher, interpretation of additional research methods, and filling out medical documentation.

Control work:

Familiarization with the main and additional literature, including reference books, foreign sources, and a summary of the main points, terms, and information required for memorization and fundamental to this topic. Compilation of summaries of the literature sources read, etc.

Abstract:

Search for literature and compilation of a bibliography, use of 3 to 5 scientific works, presentation of the authors' opinions and their judgment on the selected issue; presentation of the main aspects of the problem.

Preparing for an exam/test:

When preparing for an exam (test), it is necessary to focus on lecture notes, recommended literature, etc.

11. EDUCATIONAL AND METHODOLOGICAL RECOMMENDATIONS FOR TEACHERS

In practical classes, students are monitored to ensure that they have mastered the lecture material, and they are supervised in obstetric hospitals and maternity clinics, as well as in the examination and manipulation rooms and operating rooms. Visual aids, surgical instruments, and an obstetric phantom are used to demonstrate and practice practical obstetric skills. To assess students' ability to think clinically, they are given situational tasks, clinical case histories, test assignments, clinical analysis, and opportunities to attend medical conferences, consultations, and scientific symposiums.

Active and interactive forms of teaching are widely used in the educational process (work in small groups, activation of creative activity, use of computer training programs, lesson-conference).

The teacher controls the independent work of students, preparation of reports, research, work with the patient together with the teacher, interpretation of data of additional methods of research, filling out medical documentation.

Work with educational literature is considered as a type of educational work and is carried out within the hours allocated for its study. Each student is provided with access to the electronic library funds of the Institute and the Department.

Training students contributes to the development of their skills in communicating with pregnant women, taking into account the ethical, deontological, and psychological aspects of pregnancy.

Independent work contributes to the development of skills in working with patients, working with literature, analytical thinking, filling out documentation, and being accurate and disciplined.

The initial level of students' knowledge is determined by testing, and the current control of the subject's assimilation is determined by oral questioning during classes, during clinical reviews, while solving typical situational tasks, and answering test assignments.

At the end of the study of the academic discipline, intermediate and final control of knowledge is carried out using test control, checking practical skills and solving situational tasks.

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