

INFORMATION ABOUT THE COURSE

Gynecology and obstetrics

1. Basic information

Field of studies field of medical and health sciences, discipline: medical sciences Unit responsible for the field of studies Faculty of Medicine Bydgoszcz University of Science and Technology Level of studies Uniform master's studies Profile of studies General academic Form of studies Full-time		Studies cycle Course code 17-EMS-GAO-SP2 Language English Obligatory Yes
Prerequisites	Basics of reproductive system anatomy and physiology: Students should have knowledge of female reproductive system anatomy and physiology, including the structure of the reproductive organs and the menstrual cycle. Basics of embryology and fetal development: Understanding of the process of fetal development and complications that may occur during the prenatal period. Knowledge of the basics of genetics is important for diagnosis and genetic counseling in the field of obstetrics and gynecology. Verification method: Passing the introductory courses is equivalent to meeting the prerequisites for the course.	
Introductory courses	Anatomy, Embryology, Physiology with elements of clinical physiology, Pathophysiology, Pharmacology with toxicology, Diagnostic imaging	
Coordinator	Prof. Marek Grabiec	

Study period	Form of assessment Form and hours of classes	ECTS credits
Summer semester	Exam Lecture 20h Exercise 30h Simulation exercise 15h Seminar 15h	4.0

2. Learning outcomes

Code	Description of learning outcomes	Learning outcomes reference
Knowledge (student knows and understands):		
K1	Graduates are familiar with the development, structure, and functions of the human body under normal and pathological conditions.	O.W1.
K2	Graduates know the symptoms and progression of diseases of the female reproductive system	O.W2.

K3	Graduates know and understand diagnostic and therapeutic procedures appropriate for specific medical conditions.	O.W3.
K4	Graduates know and understand the ethical, social, and legal conditions of practicing medicine and the principles of health promotion, basing their knowledge on scientific evidence.	O.W4.
K5	Graduates are familiar with the principles of qualification for basic surgical procedures and invasive diagnostic and therapeutic procedures, the principles of their performance, and the most common complications.	F.W4.
K6	Graduates know and understand basic classical and minimally invasive surgical techniques.	F.W3.
K7	The student knows the reproductive functions of women, disorders related to them, and diagnostic and therapeutic procedures concerning in particular: 1) the menstrual cycle and its disorders, 2) pregnancy, 3) physiological and pathological childbirth and the postpartum period, 4) inflammation and cancer of the reproductive organs, 5) birth control, 6) menopause, 7) basic diagnostic methods and gynecological procedures.	F.W15.
K8	The graduate knows and understands the basic methods of fetal diagnosis and therapy.	E.W6.
Abilities (student can do/perform):		
A1	The graduate can recognize medical problems and determine priorities in medical treatment	O.U1.
A2	The graduate can recognize life-threatening conditions that require immediate medical intervention	O.U2.
A3	The graduate can plan diagnostic procedures and interpret their results	O.U3.
A4	The graduate is able to implement appropriate and safe therapeutic procedures and predict their effects	O.U4.
A5	The graduate is able to communicate with patients and their families in an atmosphere of trust, taking into account the patient's needs, and convey unfavorable information using the principles of professional communication.	O.U7.
A6	The graduate is able to apply correct medical procedures in cases of pregnancy and physiological postpartum in accordance with perinatal care standards.	F.U13.
A7	Graduates are able to recognize the most common symptoms indicating abnormal pregnancy and postpartum, apply and interpret diagnostic tests, perform differential diagnosis, implement therapy, monitor treatment effects, and assess indications for specialist consultation, particularly in cases of abdominal pain, uterine contractions, bleeding from the genital tract, abnormal heart rate and fetal mobility, and hypertension.	F.U14.

A8	The graduate is able to detect and interpret fetal heart activity.	F.U15.
A9	The graduate is able to assist in physiological childbirth.	F.U17.
A10	The graduate is able to recognize the onset of labor and symptoms of abnormal labor.	F.U16.
A11	The graduate is able to apply the correct medical procedure in cases of abnormal bleeding from the genital tract, amenorrhea, pelvic pain (inflammation of the pelvic organs, ectopic pregnancy), inflammation of the vagina and vulva, sexually transmitted diseases	F.U18.
A12	The graduate is able to apply correct medical procedures in the field of birth control.	F.U19.
Social skills (the student is ready to):		
S1	Graduates are prepared to establish and maintain deep and respectful contact with patients, as well as to show understanding for differences in worldviews and cultures.	O.K1.
S2	The graduate is ready to act in the best interests of the patient.	O.K2.
S3	The graduate is prepared to uphold medical confidentiality and patient rights.	O.K3.
S4	The graduate is prepared to take action with regard to the patient based on ethical principles, with an awareness of the social conditions and limitations resulting from pregnancy.	O.K4.
S5	The graduate is ready to promote healthy behaviors.	O.K6.
S6	Graduates are prepared to implement the principles of professional collegiality and teamwork, including with representatives of other medical professions, also in a multicultural and multinational environment.	O.K9.
S7	Graduates are prepared to accept responsibility for decisions made in the course of their professional activities, including in terms of their own safety and that of others.	O.K11.

3. Programme contents

No.	Programme contents	Form of studies	Learning outcomes covered by the programme content
1	<ol style="list-style-type: none"> 1. Anatomy of the female pelvis, structure of the birth canal; 2. Endocrinology of pregnancy. Diagnosis of pregnancy; 3. Serological conflict, non-immune edema; 4. Comorbidities of pregnancy; 5. Gestational diabetes; 6. Preterm labor; 	Lecture	K1, K2, K3, K4, K5, K6, K7, K8

	<ul style="list-style-type: none"> 7. Physiological labor; 8. Pathological labor – symptomatology 9. Operative delivery 10. Pregnancy-induced hypertension, preeclampsia, HELLP syndrome 11. Hemorrhages during pregnancy and postpartum hemorrhage 12. Trophoblastic disease, hydatidiform mole, invasive mole, choriocarcinoma 13. Infections during pregnancy. TORCH 14. Miscarriage. Habitual miscarriage. 15. Ectopic pregnancy 16. Gynecological oncology 17. Gynecological endocrinology 18. Female infertility and assisted reproduction methods 		
2	<ul style="list-style-type: none"> 1. Gynecological and obstetric examination; 2. Selected non-cancerous and cancerous diseases of the reproductive organs – symptoms, diagnosis, treatment; 3. Pregnancy, childbirth, and the postpartum period – physiology and pathology. Obstetric anatomy. Normal childbirth. Postpartum period and lactation; 4. Endocrinology of pregnancy. Pregnancy tests. Prenatal tests. Methods of hormone determination; 5. Normal pregnancy. Diagnosis of fetal development and condition; 6. Hemorrhages in the second and third trimesters; 7. Diseases coexisting with pregnancy. Cardiovascular diseases. Diseases of the hematopoietic system. Diseases of the respiratory system; 8. Pregnancy-induced hypertension. Gestational diabetes. Serological conflict; 9. Abnormal delivery. Obstetric surgery. Uterine contractile dysfunction. Anesthesia during delivery; 10. Infections during pregnancy. HIV and pregnancy. Diagnosis and treatment of TORCH. Trophoblastic disease. Miscarriages and habitual miscarriages. Ectopic pregnancy. 	Exercise, Simulation exercise	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, S1, S2, S3, S4, S5, S6, S7
3	<ul style="list-style-type: none"> 1. Obstetric anatomy. Normal delivery. Postpartum and lactation; 2. Endocrinology of pregnancy. Pregnancy tests. Prenatal tests. Methods of hormone determination; 3. Normal pregnancy. Diagnosis of fetal development and condition; 4. Hemorrhages in the second and third trimesters; 5. Diseases coexisting with pregnancy. Cardiovascular diseases. Diseases of the hematopoietic system. Diseases of the respiratory system; 6. Pregnancy-induced hypertension. Gestational diabetes. Serological conflict; 7. Abnormal delivery. Obstetric surgery. Uterine contractile dysfunction. Anesthesia during delivery; 8. Infections during pregnancy. HIV and pregnancy. Diagnosis and treatment of TORCH. Trophoblastic disease. Miscarriages and habitual miscarriages. Ectopic pregnancy. 	Seminar	K1, K2, K3, K4, K5, K6, K7, K8, A1, A3, A4, A7, A8, A12, S1, S2, S3, S4, S5, S6, S7

4. Methods of verifying and assessing the learning outcomes achieved by the student

Winter semester

Form of studies		
Lecture	Methods of studies form:	
	Lecture, Discussion	
	Methods of verification:	Involvement:
	Written exam	100%
	Conditions for passing the course:	
	<p>The prerequisite for passing the course is obtaining a positive grade on the written exam (test - 50 questions). The exam covers the topics discussed in all classes of the course. Passing grade threshold: 60%. Detailed assessment criteria are available in the Study Regulations.</p> <p>In order to be admitted to the exam, students must pass the exercises, simulation exercises, and seminars.</p>	
Exercise	Methods of studies form:	
	Clinical exercise	
	Methods of verification:	Involvement:
	Colloquium	80%
	Observation	20%
	Conditions for passing the course:	
	<p>Attendance at all classes is required to pass the course. Student activity and engagement will be assessed during the exercises. Passing the practical part of the course involves performing a medical procedure in the field of gynecology and obstetrics in simulated conditions, with a pass mark of 75%. Detailed conditions for passing the course are available in the department regulations.</p>	
Simulation Exercise	Methods of studies form:	
	Exercise in Medical Simulation Centre	
	Methods of verification:	Involvement:
	Simulation	50%
	Observation	50%
	Conditions for passing the course:	
	<p>Attendance at all classes is required to pass the course. Student activity and engagement will be assessed during the exercises. Passing the practical part of the course involves performing a medical procedure in the field of gynecology and obstetrics in simulated conditions, with a pass mark of 75%. Detailed conditions for passing the course are available in the department regulations.</p>	
Seminar	Methods of studies form:	
	Discussion, Case study, Problem-based learning	
	Methods of verification:	Involvement:
	Colloquium	50%

	Entrance test	50%
	Conditions for passing the course:	
	Each seminar begins with an entrance exam to test students' knowledge and preparation for the course. In order to pass the seminars, students must pass all entrance exams and obtain a passing grade on the final exam (single-choice test, 30 questions, passing threshold 60%).	

Learning outcomes	Methods of verification				
	Written exam	Colloquium	Observation	Simulation	Entrance test
K1	X	X			X
K2	X	X			X
K3	X	X			X
K4	X	X			X
K5	X	X			X
K6	X	X			x
K7	X	X			x
K8	x	X			X
A1			X	X	
A2			X	X	
A3			X	X	
A4			X	X	
A5			X	X	
A6			X	X	
A7			X	X	
A8			X	X	
A9			X	X	
A10			X	X	
A11			X	X	
A12			X	X	
S1			X	X	
S2			X	X	
S3			X	X	

S4			X	X	
S5			X	X	
S6			X	X	
S7			x	X	

5. Student workload – balance of hours and ECTS credits

Students activity		Student workload Number of hours
Classes conducted with the direct participation of an academic teacher or other persons conducting classes	Lecture	20
	Exercise	30
	Seminar	15
	Simulation exercise	15
Student's own work	Preparing for classes	5
	Studying literature	10
	Preparing for a test	5
	Preparing for an exam	10
Total student workload		120
ECTS		4

One (teaching) hour is 45 minutes.

6. Literature

The list of required and recommended literature will be provided by the lecturer at the first meeting.