

# The Physiology of Pregnancy

1. IMPRINT	
Academic Year	2023/2024
Department	Faculty of Dental Medicine
Field of study	English Dentistry Division
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniforms MSc
Form of studies	Full-time program
Type of module/ course	Obligatory
Form of verification of learning outcomes	Completion
Educational Unit / Educational Units	I Department of Obstetrics and Gynaecology 02-015 Warsaw, Starynkiewicza Square 1/3 Tel: (22) 58 30 301 ; Fax. (22) 58 30 302 e-mail: iwona.dmochowska@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Professor Artur Ludwin MD, PhD

Course coordinator	Professor Artur Ludwin MD, PhD; artur.ludwin@wum.edu.pl		
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2. BASIC INFORMATION				
Year and semester of studies	mester III year; V Semester		Number of ECTS credits	1
Forms of classes Contacting hours with academic teacher		Number of hours	ECTS credits calculation	
Lecture (L)		6	0,24	
Seminar (S)		-	-	
Discussions (D)		-	-	
e-learning (e-L)				
Practical classes (PC)		9	0,36	
Work placement (WP)		-	-	
Unassisted student's work				
Preparation for classes and completions		10	0,4	

3.	COURSE OBJECTIVES
01	To familiarize students with basic medical knowledge of the physiology of pregnancy, delivery and neonatal care.
02	The main goal of education is to familiarize students with physiological changes in the body of a pregnant woman, the course of uncomplicated pregnancy and childbirth, as well as puerperal changes.
03	Developing student's ethical, social and legal conditions for exercising the medical profession and principles of health promotion based on scientific evidence and accepted standards of conduct.

04	To make students aware of the need to systematically supplement their knowledge in the field of: - knowledge and understanding of the causes, symptoms and principles of diagnosis and therapeutic procedure in relation to the course of physiological pregnancy, - knowledge about the woman's reproductive functions, disorders related to them, principles of procreation planning.
05	In terms of skills, the student should: -recognize signs and symptoms of normal pregnancy and symptoms of abnormal pregnancy (uterine bleeding, uterine contractions), -interpret the results of the physical pumpkin of a pregnant woman (blood pressure, pregnant heartbeat) and the results of laboratory tests that show the correct course of pregnancy, - know the correct mechanism of delivery (start of delivery and it's incorrect duration), - interpret the signs and symptoms during the puerperium, - establish recommendations and contraindications for the use of contraception methods, - effectively use sources of information on medical issues and verifies their credibility, - have self-study skills.
O6	In terms of competence, the student should: - show respect for the patient and concern for his welfare, - adhere to the ethical principles and patient rights in its activities (protection of personal data, intimacy), - systematically supplement and update knowledge and is able to critically analyse data from the literature – can work in a group and implement camaraderie principles, - effectively cooperate with representatives of other professions in the field of health protection, - demonstrate responsibility for his professional development and contribution to the further development of medical sciences, - recognize its own limitations, assesses its own deficit and education all needs, and plan educational activity and its evaluation.

### 4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number o effect of learning in accordance with standards of learnin	Effects of learning in time		
Knowledge – Gradu	ate* knows and understands:		
E.W10.	hormonal conditions of a woman's body in particular periods of life;		
E.W11.	the influence of a pregnant woman's nutrition and addiction on the development of the fetus;		
E.W12.	principles of dental care in pregnancy;		
Skills– Graduate* is	able to:		
D.U10.	work in a multidisciplinary team, in a multicultural and multinational environment;		
G.U25.	explain and apply the standards contained in the Code of Medical Ethics and international standards of medical ethics;		

5. ADDITIONAL LEARNING EFFECTS			
Number of learning effect	Effects of learning in time :		

Appendix No 3 for Regulation No 101/2023 of MUW's Rector dated 28.04.2023 r. Appendix No 4 for the procedure of development and periodical review of syllabuses

Knowledge –	Graduate knows and understands:
К1	issues in the field of medicine and natural sciences - in the basic scope.
К2	issues in the field of dentistry – at an advanced level.
К3	health education issues.
К4	principles of conducting scientific research and disseminating their results.
К5	organization of dentist practice and management principles in the healthcare system.
Skills– Gradu	ate is able to:
S1	conduct clinical proceedings based on knowledge and respecting the principles of humanitarianism.
S2	plan your own educational activity and constantly improve your skills to update your knowledge.
\$3	inspirer other people's learning process.
S4	communicate with the patient and his family in an atmosphere of trust, taking into account the needs of the patient.
S5	communicate with colleagues in the team and share knowledge.
S6	critically evaluate the results of scientific research and properly justify the position.
Social Compe	etencies – Graduate is ready for:
SC1	establishing and maintaining deep and respectful contact with the patient, as well as showing understanding for ideological and cultural differences.
SC2	patient welfare.
SC3	respecting the medical confidentiality of patient's law.
SC4	taking actions towards the patient based on ethical principles, with the awareness of social conditions and limitations resulting from the disease.
SC5	noticing and recognizing one's own limitations, self-assessing deficits and educational needs.
SC6	promotion of health behaviours.
SC7	using objective sources of observation.
SC8	formulate conclusions from own mentor observations.
SC9	implementation of the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, as well as in a multicultural and multinational environment.

6. CLASSES		
Form of class	Class contents	Effects of Learning

	L1 – Lecture 1 - Physiological changes in normal pregnancy. The scope of the lectures include objective and subjective symptoms of early pregnancy, methods of diagnosis, determination of the date of birth and the changes that occur in the different systems of the pregnant woman. Lecture – Weronika Knap-Wielgus, MD	E.W10.
LECTURE	L2 – Lecture 2 -Physiological childbirth. The lecture covers the basic concepts of anatomy of the pelvis taking into account obstetrical concepts, foetal anatomy and onset of labour. These are physiological parturition, taking into account external and internal examinations. Lecturer – Ksawery Goławski, MD	E.W11.
	L3 – Lecture 3 - MDThe physiology o the neonatal period. The lecture takes into account the basis of neonatal examination after a physiological birth and all the steps that should be taken after the birth of the fetus. Lecturer – Justyna Romańska, MD	E.W12.
	Practical classes - exercises - cover a range of topics on the knowledge from lectures in a practical aspect. Classes will be held in the labour ward and on medical models.	
	PC1 - Practical classes 1 - Practical discussion, on the examples, of the menstrual cycle, hormonal changes during pregnancy, objective and subjective symptoms of early pregnancy, methods of diagnosing pregnancy, determining the date of delivery and identification of changes occurring in the various systems of a pregnant woman.	D.U10., G.U25., K1 -K5, S1- S6, SC1-SC9
Practical classes	PC2 - Practical classes 2 - Discussion the impact of diet and environmental factors on the development of a child in the fetal, neonatal and infancy period with examples.	D.U10., G.U25., K1 -K5, S1- S6, SC1-SC9
	PC3 - Practical classes 3 - Discussion successive stages of physiological childbirth, including external and internal obstetric examination - exercises on phantoms, videos of physiological childbirth and operative delivery, and caesarean section. Classes take place in the delivery room and on phantoms in the simulation center.	D.U10., G.U25., K1 -K5, S1- S6, SC1-SC9
	Classes are conducted by Elżbieta Bumbul-Mazurek, MD Katarzyna Jasińska, MD Joanna Blok, MD, Daria Salloum, MD, Łucja Zaborowska, MD, Izabela Walasik-Szewczyk, MD, Gabriela Grala, MD, Ksawery Goławski, MD Joanna Król, MD, Monika Zasztowt-Sternicka, MD	

# 7. LITERATURE

#### Obligatory

Obstetrics and gynecology. Samanta M. Pfeifer. Wolters Kluwer 2008.

#### Supplementary

Obstetrics and Gynaecology. Charles R.B. Beckman At al 2013.

# 8. ASSESSMENT THE EFFECTS OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Criteria
E.W10., E.W11., E.W12.,	Check the attendance and active participation in the field of discussion: physiology of pregnancy, childbirth and care of the newborn.	The pass mark is the active participation and maximum attendance at lectures exercises
D.U10., G.U25., K1 - K5 S1 - S6, SC1 - SC9	Oral exam evaluating the last practical classes (including materials from both lectures and practical classes).	The oral test on the day of the last practical classes (80% correct answers are required to receive credit scope of lectures and practical classes). - observing the student's work, - assessment of activity during classes, - assessment of preparation for classes, - discussion during classes,

# 9. ADDITIONAL INFORMATION

Students are required to have their own name identifier , shoes and protective clothing (uniform) in order to take part in practical classes in the labour ward.

On the first day of the classes, students will be assigned a locker (1 person per 1 locker), allowing them to leave their clothes in a change. The refundable deposit for the issue is 50 zloty.

Losing the key to the locker obliges the student to make extra the key on his own or to keep the deposit by the secretariat to cover the cost of making the extra key.

#### The block of classes lasts 3 weeks:

Obligatory participation in three lectures (2 hours each) on the basics of physiology for pregnancy, childbirth and newborn care. Obligatory participation in practical exercises at phantoms and delivery room (3 meetings once a week for 3 hours).

During classes, in exceptional situations, one excused absence is allowed, which must be made up with the Course Coordinator. Absence longer than 1 day of classes results in the need to make up for the entire block with another group or after the completed block of classes, individually with the Course Coordinators.

Passing the course will be possible after catching up on the backlog /absences, no later than 3 weeks after the end of the class block.

# Depending on the group classes at the I Department of Obstetrics and Gynaecology take place from Monday to Friday from 10.45-15.00. (including a 15-minute break):

- 10.45-12.15 lectures in the lecture hall or on-line (2h), - 12.30-14.45; 12.45-15.00 - practical classes – exercises,
- 12.15 -12.30; 12.30-12.45 break.

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#### ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers