



THE PHYSIOLOGY OF PREGNANCY

1. IMPRINT	
Academic Year	2022/2023
Department	Faculty of Dental Medicine
Field of study	English Dentistry Division
Main scientific discipline <i>(in accordance with appendix to the Regulation of Minister of Science and Higher Education from 26th of July 2019)</i>	Medical sciences
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level / 2nd level / uniform MSc)</i>	Uniforms MSc
Form of studies	Full-time program
Type of module/ course <i>(obligatory / non-compulsory)</i>	Obligatory
Form of verification of learning outcomes <i>(exam/completion)</i>	Completion
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	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

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Course coordinator (title, First Name, Last Name, contact)	Professor Artur Ludwin MD, PhD; artur.ludwin@wum.edu.pl, Barbara Suchońska, MD, PhD; barbara.suchonska@wum.edu.pl, (22) 58 30 301
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Teachers	Anna Cyganek, MD, PhD Iwona Szymusik, MD, PhD Natalia Mazanowska, MD Paweł Krajewski, MD Cynthia Smeding, MD; cynthia.smeding@wum.edu.pl Tomasz Pomianek, MD Jacek Lipa, MD

2. BASIC INFORMATION			
Year and semester of studies	III year; V Semester	Number of ECTS credits	1
Forms of classes		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
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	
O1	To familiarize students with basic medical knowledge of the physiology of pregnancy, delivery and neonatal care.
O2	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.

O3	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.
O4	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.
O5	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 *(concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)*

<p>Code and number of effect of learning in accordance with standards of learning <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i></p>	<p>Effects of learning in time</p>
<p>Knowledge – Graduate* knows and understands:</p>	
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;
<p>Skills– Graduate* is able to:</p>	
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;
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** In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019, „graduate”, not student is mentioned.*

5. ADDITIONAL LEARNING EFFECTS *(non-compulsory)*

Number of learning effect	Effects of learning in time :
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Knowledge – Graduate knows and understands:

K1	issues in the field of medicine and natural sciences - in the basic scope.
K2	issues in the field of dentistry – at an advanced level.
K3	health education issues.
K4	principles of conducting scientific research and disseminating their results.
K5	organization of dentist practice and management principles in the healthcare system.

Skills– Graduate 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.
S3	inspire 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 Competencies – 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.
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6. CLASSES		
Form of class	Class contents	Effects of Learning
LECTURE	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 – Natalia Mazanowska, MD	E.W10.
	L2 – Lecture 2 -The 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 – Paweł Krajewski, MD	E.W11.
	L3 – Lecture 3 - 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 - Anna Cyganek, MD, PhD	E.W12.
Practical classes	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
	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 Bartosz Godek , MD; Damian Warzecha, MD; Jacek Lipa, 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.g. G.K1., G.S1., K1.	This field defines the methods used for grading students e.g. pop quiz, test, written report etc	e.g. threshold number of points
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 *(information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)*

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, one justified absence is allowed in exceptional cases, which should be done with the Course Coordinator. An absence longer than 1 day of classes results in the need to make up for the whole 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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