Appendix 5
to Resolution No. 15630
of Senate of Wroclaw Medical University
of 30 March 2016

Syllabus for academic year 2017/2018			
Description of the course			
Module/Course	Human embryology	Group of detailed education results	
		Group code A	Group name Morphological Science
Faculty	Medicine		
Major	medicine		
Specialties	not applicable		
Level of studies	Uniform magister studies X 1st degree studies ☐ 2nd degree studies ☐ 3rd degree studies ☐ postgraduate studies ☐		
Form of studies	X full-time X part-time		
Year of studies	I	Semester	☐ Winter X Summer
Type of course	X obligatory ☐ limited choice ☐ free choice / elective		
Course	X major ☐ basic		
Language of instruction	☐ Polish X English ☐ other		
* mark ☐ with an X			

Number of hours														
Form of education														
Unit teaching the course	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	Practical Classes with Patient (PCP)	Specialist Classes – magister studies (SCM)	Foreign language Course (FLC)	Physical Education obligatory (PE)	Vocational Practice (VP)	Self-Study (Student's own work)	E-learning (EL)
Winter Semester -														
Summer Semester														
Department of Histology and Embryology		30												
TOTAL per year: 30 hours														
Department of Histology and Embryology		30												

Educational objectives (max. 6 items)

C1. Acquaintance of the students with normal human embryonic development and fetal development.

C2. Acquaintance of the students with the development of organs and systems and the mechanisms organ anomalies formation.

C3. Presentation of causes, types and mechanism of congenital anomalies formation with emphasis on their genetic and environmental background.

Education result matrix for module/course in relation to verification methods of the intended education result and the type of class

Number of course education result	Number of major education result	Student who completes the module/course knows/is able to	Methods of verification of intended education results (forming and summarising)	Form of didactic class ***enter the abbreviation*
K 01	A.W6. B.W27	describes the processes of gametogenesis and fertilization	oral or written response, quiz	SE
K 02	A.W6.	explains all the stages of normal human prenatal development	oral or written response, quiz	SE
K 03	A.W6.	describes the structure and function of fetal membranes and placenta	oral or written response, quiz	SE
K 04	A.W6. B.W30	explains the formation of developmental disorders of organs and systems, understands their causes.	oral or written response, quiz	SE
K 05	A.W1.	knows the embryological nomenclature in English	oral or written response, discussion, quiz	SE
S 01	A.U5.	uses embryological terminology in written and spoken form	oral or written response, discussion, quiz	SE
S 02	B.U14.	solves problems involving the logical use of embryological knowledge	oral or written response, discussion, quiz	SE

** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .

Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes:

Knowledge: 5

Skills: 3

Student's amount of work (balance of ECTS points)

Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
1. Contact hours:	30
2. Student's own work (self-study):	9
Total student's workload	39
ECTS points for module/course	2,5

Comments	

Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

Lectures -

Seminars (SE)

1. Molecular basis of development (2 hours)
2. Gametogenesis: meiosis, oogenesis, spermatogenesis (2 hours)
3. 1st week: from ovulation to implantation (2 hours)
4. 2nd-3rd week: germ disc and germ layers (2 hours)
5. 3rd-8th week: organogenesis, embryonic period (2 hours)
6. 9th week to birth: fetal period (2 hours)
7. Fetal membranes and placenta (2 hours)
8. Development of pharyngeal apparatus (head and neck) (2 hours)
9. Development of respiratory and digestive systems (2 hours)
10. Development of cardiovascular system (2 hours)
11. Development of muscular, skeletal and integumentary system (2 hours)
12. Development of urogenital system (2 hours)
13. Development of nervous system (2 hours)
14. Birth defects (2 hours)
15. Make-up and repetition (2 hours)

Practical classes -

Other -

Basic literature (list according to importance, no more than 3 items)

1. Langman's Medical Embriology. T.W. Sadler; Lippincott Williams & Wilkins

Additional literature and other materials (no more than 3 items)

1. The Developing Human. Clinically Oriented Embryology. Keith L. Moore, T.V.N. Persaud; Saunders Elsevier.
2. Before we are Born. Essentials of Embryology and Birth Defects. Keith L. Moore, T.V.N. Persaud, Mark G. Torchia; Saunders Elsevier

Didactic resources requirements (e.g. laboratory, multimedia projector, other...)

Seminar classroom, laptop, multimedia projector, whiteboards

Preliminary conditions (minimum requirements to be met by the student before starting the module/course) -

Conditions to receive credit for the course (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be med by the student to pass it and criteria for specific grades)

The course ends with credit of semester (without an examination). Conditions for subject completion is to obtain credit from individual seminars ("no credit" limit: 3 seminars/topics) and **final test of the whole material.** Form of test: written, 50 multiple choice questions. For credit are required 26 correct answers.

Grade:	**Criteria** (only for courses/modules ending with an examination)
Very Good (5.0)	-
Good Plus (4.5)	-

Good (4.0)	-
Satisfactory Plus (3.5)	-
Satisfactory (3.0)	-

Name and address of module/course teaching unit, contact: telephone and e-mail address

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Coordinator / Person responsible for module/course, contact: telephone and e-mail address

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Signature of person responsible for module

Uniwersytet Medyczny we Wrocławiu
KATEDRA I ZAKŁAD
HISTOLOGII I EMBRIOLOGII
profesor zwyczajny
prof. dr hab. Marzenna Podhorska-Okołów

List of persons conducting specific classes: full name, degree/scientific or professional title, discipline, performed profession, form of classes.

1. dr Sylwia Borska (adiunct, medical biology) – SE

Date of Syllabus development

20.06.17

Syllabus developed by

Dr Sylwia Borska

Signature of Head of teaching unit

Uniwersytet Medyczny we Wrocławiu
KATEDRA I ZAKŁAD
HISTOLOGII I EMBRIOLOGII
kierownik
prof. dr hab. Piotr Dzięgiel

Signature of Faculty Dean

Wroclaw Medical University
FACULTY OF MEDICINE
VICE-DEAN FOR STUDIES IN ENGLISH
Prof. Andrzej Hendrich, PhD