



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 <i>**enter the abbreviation</i>
K01	A.W6.	knows the stages of human embryo development	oral response, presentation, test	SE
K02	A.W6.	describes the function of fetal membranes and placenta	oral response, presentation, test	SE
K03	A.W6.	describes the stages of development of individual organs	oral or written response, presentation, test	SE
K04	A.W6.	explains the impact of harmful factors on embryo and fetal development (teratogenic)	oral response, presentation, test	SE
K05	A.W1.	knows the embryological nomenclature in English	oral response, presentation, test	SE
S01	A.U5.	uses embryological terminology in written and spoken form	oral or written response, discussion, presentation, test	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: ....

Skills: ....

**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
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

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

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, criteria 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 met 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 prepare (and present) individually 2 presentations and final test of the whole material. Form of test: written, 30 multiple choice questions. For credit are required 16 correct answers (16 points).

Each absence must be made up, including rector's days or dean's hours.

Grade:	Criteria for course
Very Good (5.0)	2 presentations; 28-30 points (test)
Good Plus (4.5)	2 presentations; 25-27 points (test)
Good (4.0)	2 presentations; 22-24 points (test)
Satisfactory Plus (3.5)	2 presentations; 19-21 points (test)
Satisfactory (3.0)	2 presentations; 16-18 points (test)

Grade:	Criteria for exam (if applicable)
Very Good (5.0)	-
Good Plus (4.5)	-
Good (4.0)	-
Satisfactory Plus (3.5)	-
Satisfactory (3.0)	-

<b>Name of unit teaching course:</b>	<b>Division of Histology and Embryology</b>
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<b>Person responsible for course:</b>	<b>Prof. dr hab. Marzenna Podhorska-Okotów</b>
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<i>List of persons conducting specific classes:</i>	<i>degree/scientific or professional title</i>	<i>Discipline</i>	<i>Performer profession</i>	<i>Form of classes</i>
<b>Dr Sylwia Borska</b>	dr of medical science	medical biology	adjunct	SE

**Date of Syllabus development**

15.06.2020

**Syllabus developed by**

Sylwia Borska

Signature of Head of teaching unit  
ZAKŁAD HISTOLOGII I EMBRIOLOGII



.....prof. dr hab. Piotr Dziegiel.....

Signature of Faculty Dean



.....  
Vice-Dean for English Studies  
prof. Beata Sobieszcańska, FdE