



48SJ-IIT27

ECTS: 1

YEAR: 2020L

**INTEGRATED AND INTERDISCIPLINARY TRAINING 2**  
**INTEGRATED AND INTERDISCIPLINARY TRAINING 2**

**COURSE CONTENT**  
**CLASSES**

Anatomical landmarks and clinical and ultrasound anatomy of the head and neck, chest, abdomen and pelvis and upper and lower limbs. Anatomical basis of internal and surgical examination of the structures and organs of the neck, chest, abdomen and pelvis. Ultrasound (US) terminology: hyperechoic, isoechoic, hypoechoic. Ultrasound machine – how it works, types of ultrasound heads, transducer frequency. Proper selection of the probe for the US examination. Preparation and positioning of the patient for US examination. Application of US examination in medicine – types and methods of examinations in the neck (thyroid and salivary glands, vessels and lymphatic nodes), abdomen and pelvis (organs and vessels, retroperitoneal spaces) and soft tissue. Clinical classification of the lymph nodes of the neck. Visualization and evaluation of the organs and structures of the neck, abdomen and pelvis during US examination. Abdominal and pelvic US examination of liver, gallbladder, bile ducts, pancreas, spleen, aorta and their branches kidney, urinary bladder, prostate and uterus – visualization and evaluation. Individual work of the student with the patient – assessment of professionalism, social competences and student-patient relationship. Body cavities development, celoma. Embryological development and formation of cardiovascular and respiratory system, digestive and urogenital system. Introduction to medical communication: the therapeutic aspect of communication

**LECTURES**

-

**EDUCATIONAL OBJECTIVE:**

The main aim of the course "Integrated and Interdisciplinary Training - Embryology" is to provide students with knowledge about the proper prenatal development of humans including pre-embryonic, embryonic and fetal periods, and to present the development of individual organs and systems, as well as basic disorders associated with their development. The purpose of the course is to discuss the most important causes, types and mechanisms of developmental defects as well as their genetic and environmental conditioning. The basic assumption was that learning about prenatal development, the mechanisms guiding this development and the molecular aspect of developmental biology is a necessary introduction to teaching other disciplines in further years of study. The basic part of the teaching is the transfer of knowledge about morphological transformations, thanks to which cells are determined to form different parts of the embryo, fetus and newborn. In the part of medical communication, the student learns the importance of the therapeutic dimension of communication.

**DESCRIPTION OF LEARNING OUTCOMES FOR THE COURSE IN RELATION TO FIELD AND MAJOR LEARNING OUTCOMES**

Codes of learning outcomes in a major field of study:	M/NM+++ , M/NMA_P7S_KR+ , M/NMA_P7S_UW+ , M/NMA_P7S_WG++ ,
Codes of learning outcomes in a major area of study:	A.U3.+ , A.U4.+ , A.U5.+ , A.W1.+ , A.W3.+ , A.W4.+ , A.W6.+ , B.W8.+ , D.U16.+ , D.U5.+ , K.5+ , K.6.+ , K.7.+ , KA7_KR1+ , KA7_UW5+ , KA7_WG1+ , KA7_WG3+ ,

**LEARNING OUTCOMES:**

**Knowledge**

W1 - A.W1. , A.W3. , A.W4. , A.W6. , B.W8.  
W2 - KA7\_WG1 , KA7\_WG3

**Skills**

U1 - A.U3. , A.U4. , A.U5. , D.U5. , D.U16. , KA7\_UW5

**Social competence**

K1 - K.5 , K.6. , K.7. , KA7\_KR1

**BASIC LITERATURE**

1) T. W. Sadler, Langman's Medical Embryology, wyd. Lippincott Williams & Wilkins, 2014, t. 13th ed ; 2) Berthold Block., Color Atlas of ultrasound anatomy , wyd. Thieme, 2011 ; 3) Steven M. Penny , Pocket Anatomy & Protocols for Abdominal Ultrasound, wyd. LWW, 2019

**SUPPLEMENTARY LITERATURE**

1) B. M. Carlson, Human Embryology and Developmental Biology, 6th ed, wyd. MOSBY Elsevier, 2019, t. 1 ; 2) Berthold Block., Abdominal Ultrasound: Step by Step, wyd. Thieme, 2015

**Course/module:** Integrated and Interdisciplinary Training 2

**Fields of education:**

**Course status:** mandatory

**Course group:** B - przedmioty kierunkowe

**ECTS code:**

**Field of study:** Medicine

**Specialty area:** Medicine

**Educational profile:** General academic

**Form of study:** full-time

**Level of study:** uniform master's studies

**Year/semester:** 1 / 2

**Type of course:**

Classes

**Number of hours per semester/week:** Classes: 24

**Teaching forms and methods**

Classes(K1, U1, W1, W2) : Classes are held in the form of a multimedia presentation (PowerPoint presentation). Classes are carried out stationary or with remote learning platforms (MOODLE, MS TEAMS). Figures card to complete during classes.

**Form and terms of the verification results:**

CLASSES: Written test - Written test - "Embryology" part: a written test consisting of 20 single-choice test questions. Results are evaluated according to the percentage system of correct answers (0-100%). To credit "Embryology" part of the subject student's score must be at least 50% of correct answers. Head of department will set the additional test (20 single-choice test questions) for students who didn't pass credit. Conditions for passing part of ultrasound and physical examination: practical OSPE test - passing from 60% correct answers and a test of 10 true / false questions, passing from 60% correct answers The condition for completing the entire course is to pass both parts of the course (Embryology and USG). The final grade is average of 2 assessments (1 = embryological assessment, 2 = ultrasound and physical exam assessment)(K1, U1, W1, W2)

**Number of ECTS points:** 1

**Language of instruction:** English

**Introductory courses:**

biology, basic anatomy, basic physiology, neuroanatomy

**Preliminary requirements:**

Basic knowledge of anatomy, basic knowledge of biology and physiology. Knowledge of the anatomy of the central nervous system

**Name of the organizational unit offering the course:**

Katedra Histologii i Embriologii Człowieka, ; Katedra Radiologii,

**Person in charge of the course:**

prof. dr hab. n. med. Zbigniew Kmieć , dr hab. n. med. Anna Żurada,

**Course coordinators:**

lek. Joanna Krysztopik , mgr Maria Libura , mgr Damian Tański , dr Jolanta Kiewisz , dr

**Notes:**

Base and sequential subject.

Detailed description of the awarded ECTS points - part B

**48SJ-IIT27**  
**ECTS: 1**  
**YEAR: 2020L**

**INTEGRATED AND INTERDISCIPLINARY TRAINING 2**  
**INTEGRATED AND INTERDISCIPLINARY TRAINING 2**

The awarded number of ECTS points is composed of:

1. Contact hours with the academic teacher:

- participation in: classes	24 h.
- consultation	2 h.
	26 h.

2. Student's independent work:

- students should be prepared to actively participate in practical classes. students are obliged to read, analyze and memorize the material based on recommended textbooks (listed on department's website).	-1 h.
	-1 h.

1 ECTS point = 25-30 h of the average student's work, number of ECTS points = 25 h : 25 h/ECTS = 1,00 ECTS  
on average: **1 ECTS**

- including the number of ECTS points for contact hours with direct participation of the academic teacher:	1,04 ECTS points,
- including the number of ECTS points for hours completed in the form of the student's independent work:	-0,04 ECTS points,