

UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN Faculty of Medicine

Course sylabus - part A Problem Based Learning 2/4

48SJO-PBL24 ECTS: 1.00 CYCLE: 2024

SUBJECT MATTER CONTENT

CLASSES

Clinical, ultrasound anatomy of head and neck, thoracic, abdominal, and pelvic structures. Physical examination: inspection of the chest and abdomen, palpation of the chest and abdomen, percussion and auscultation of the chest and abdomen. Anatomical basis of ultrasound examination of head and neck, abdominal, pelvic structures. Proper selection of a probe for a given examination. Preparation and positioning of the patient for ultrasound examination. Basic selected concepts used in ultrasonography - hyperechoicity, isoechogenicity, hypoechogenicity. Structure of the ultrasound machine, types of ultrasound transducers, frequency of the transducer. Application of ultrasonography In medicinetypes of examinations. Application of ultrasonography in diagnosis of head and neck, visualization, ultrasonographic anatomy and evaluation of structures: thyroid gland, vessels of the neck (neurovascular bundle), lymph nodes of the neck, soft tissues, muscles, salivary glands. Clinical division of lymph nodes of the neck. Application of ultrasonography In the diagnosis of organs of the trunk visualization, ultrasound anatomy and evaluation of structures and organs including: lungs and pleural cavities, liver, gallbladder, biliary tract, pancreas, spleen, large vessels of the abdominal cavity and organs of the urinary system and pelvic organs. Individual work, interpretation and understanding of ultrasound images, Introduction to patient communication and standardized patient and simulated - assessment of professionalism, social competence and student-patient relationship.

TEACHING OBJECTIVE

To learn and understand the clinical interpretations of the issues of ultrasonographic anatomy, the interrelationship between the structure and function of the various organs of the head and neck, as well as the abdominal and pelvic cavities, taking into account the fundamentals of ultrasonography. Basic concepts in ultrasonography, fundamentals and principles of ultrasonographic examination including clinical and topographic anatomy of the structures of the head and neck, chest, abdominal and pelvic cavity and anatomy of superficial structures and interpretation of ultrasound images.

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes

Legal acts specifying learning outcomes: 311/2023 Disciplines: medical sciences Status of the course:Obligatoryjny Group of courses:B przedmioty kierunkowe Code: ISCED 0912 Field of study: Medicine Scope of education: Profile of education: General academic Form of studies: full-time Level of studies: uniform master's studies Year/semester: /2

Types of classes: Classes Number of hours in semester:Classes: 12.00 Language of instruction:English Introductory subject: biology, basic anatomy, basic physiology Prerequisites: Basic knowledge of human biology, anatomy, and physiology.

Name of the organisational unit conducting the course:Katedra Radiologii Person responsible for the realization of the course:lek. Karina Borszczewska-Chechłowska e-mail: karina.borszczewska@uwm.ed u.pl

Additional remarks:

related to the discipline:

Symbols for outcomes K.6.+, KA7_UW5+, K. related to the field of study: K.8.+, A.U5.+, K.7.+

K.6.+, KA7_UW5+, K.5.+, KA7_WG1+, A.U4.+, A.W3.+, B.W8.+, A.W2.+, A.U3.+, A.W1.+, K.8.+, A.U5.+, K.7.+

LEARNING OUTCOMES:

Knowledge:

W1 – The Graduate knows and understands: A.W2. the composition of the human body in terms of its topography (upper and lower limbs, the chest, abdomen, pelvis, back, neck, head) and functions (the osteoarticular system, muscular system, cardiovascular system, respiratory tract, digestive system, urinary tract, procreation systems, nervous system and sense organs, the common integument);

W2 – The Graduate knows and understands anatomical, histological and embryological terminology in Polish and English

W3 – The Graduate knows and understands: A.W3. the topographic relations between individual organs;

W4 – The Graduate knows and understands: B.W8. the physical grounds of non-invasive imaging methods;

W5 – The Graduate knows and understands: KA7_WG1 The structure of the human body on the basis of the vital diagnostic examinations, in particular, review photos, ultrasound images, CT and MRI scans

Skills:

U1 – The Graduate is able to: A.U5. use the anatomic, histological, and embryological nomenclature in speech and writing.

U2 – The Graduate is able to: A.U3. explain the anatomical grounds of physical examination;

U3 – The Graduate is able to: A.U4. formulate conclusions as to the relation between anatomical structures based on intravital diagnostic tests, especially of the radiological type (plain film, tests with contrasts agents, computer tomography, and nuclear magnetic resonance)

U4 – The Graduate is able to: KA7_UW5 assist during the ultrasound examination, visualize selected structures and interpret the obtained images and infer the presence of pathological changes

Social competence:

K1 – The Graduate is prepared to: K.5. perceive and recognizing one's own limitations and self-assessing educational deficits and needs

K2 – The Graduate is prepared to: K.7. use of objective sources of information

K3 – The Graduate is prepared to: K.8. formulate conclusions from their own measurements or observations

K4 - The graduate is ready to: K.6. promote healthy behaviors

TEACHING FORMS AND METHODS:

Classes(W1;W2;W3;W4;W5;U1;U2;U3;U4;K1;K2;K3;K4;):Multimedia presentations (Power Point). Practical exercises, where the student practices the basics of physical examination and ultrasound, and assesses and finds structures in the field of surface anatomy and palpation

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Classes (Colloquium practical) - OSPE-type practical pass - the pass condition is obtaining more than 60% correct answers and a true / false test- the pass threshold is 60%.

BASIC LITERATURE:

1. Berthold Block, *Color Atlas of ultrasound anatomy*, Wyd. Thieme, R. 2011

SUPPLEMENTARY LITERATURE:

Detailed description of ECTS credits awarded - part B 48SJO-PBL24 ECTS: 1.00 CYCLE: 2024 Problem Based Learning 2/4 The number of ECTS credits awarded consists of: Image: Consultation of ECTS credits awarded consists of: 1. Contact hours with the academic teacher: 12.0 h - participation in: Classes 12.0 h - consultation 2.0 Total: 14.0 h 14.0 h

2. Independent work of a student:

student's own work

11.00 h

Total: 11.0 h

contact hours + independent work of a student Total: 25.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = 25.0 h : 25.0 h/ECTS= 1.00 ECTS on average: 1.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: