UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN



of Medicine

Course/module syllabus - part A

CLINICAL SKILLS LABS 4 CLINICAL SKILLS LABS 4

48SJ-CSL45 ECTS: 1 **YEAR: 2023L**

COURSE CONTENT **CLASSES**

Performing the correct 12-lead ECG recording. Interpreting the correct and uncorrect ECG recording. Ischemia and myocardialinfarction in ECG recording. Cardiac arrythmias (life-threatening bradyarrhythmias, ventricular and supraventricular tachyarrhythmias). Ultrasound anathomy od the organs and structures of the neck, abdomen and pelvis - reviw. Information reminder about preparation and positioning of the patient for US examination as well as types of ultrousound heads, transducer frequency and proper selection of the probe for the US examination. Normal values and norms in US examination of the structures and organs during neck, abdomen and pelvis examination. Types and methods of examnations in the neck (thyroid and salivary glands, vessels and lymphatic nodes) the most common pathologies and their differentia diagnosis. US Doppler examination of the neck vessels. FAST and emergency US – how to do it. US technics for abdominal and pelvic organs examination (liver, gallblader, bile ducts, pancreas, spleen, intestine, kidney, urinary bladder, prostate and uterus). Abdominal vessels and retroperitoneal space US examination. Application of US examnation in medicine the most common US signs and pathologies during examination and interpretation of the US images. Individual work of the student with the patient - assessement of professionalism, social competences and student-patient relationship. Basic principals and techniques of fine needle biopsy - presentation and student's individual work during biopsy.

LECTURES

EDUCATIONAL OBJECTIVE:

Upon completion of this module, the student should be able to: 1. understands clinical interpretations of the US anatomy and the most common pathology during US examination; 2. Understands the sonographic interrelationships between the structure of the organs of the head and neck, abdomen and pelvis taking into account the basics of ultrasound examination. The student should acquired and developed the basics and principles of ultrasound examination, taking into account topographic anatomy of the organs and structures of the neck, chest, abdomen and pelvis and interpret the ultrasound images. The student knows the basic symptoms and US signs and principles of differentiation of selected pathologies in US examination. The student can independently perform an US examination and vizualize and asses structures and organs of the neck, abdomen and pelvis as well as interpret the most common pathologies. The student can also work in a group uses acquired skills and the available literature. The student is able to establish respectful contact with the patient, observing the principles of septic and antiseptic rules and the principles of proffesional behawior. The student knows the basic and principles and techniques of fine needle biopsy under US guidance, is able to perform a biopsy of the leasion under US image control. The student knows and improves the methods of recording and interpreting the ECG test, performs 12-lead ECG, is able to recognize and correctly interpret cardiac arrhytmias in emergencies, he recognizes the type and location of ischemic changes in the myocardium and selected ECG pathologies.

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_UW+, M/NMA_P7S_WG+++,

Codes of learning outcomes in a major area

B.W8.+, E.U29.+, E.W7.+, F.W10.+, K.5+, K.6.+, K.7.+, K.8.+, KA7_UW5+, KA7_WG1+, KA7_WG14+, KA7_WG3+,

LEARNING OUTCOMES:

Knowledge

W1 - E.W7.

W2 - KA7_WG1 W3 - KA7_WG3

W4 - F.W10.

W5 - KA7_WG14

W6 - B.W8.

U1 - E.U29.

U2 - KA7_UW5

Social competence

K1 - K.5, K.6, K.7, K.8

BASIC LITERATURE

1) Berthold Block, Color Atlas of ultrasound anatomy, wyd. Thieme, 2011; 2) Steven M. Penny, Pocket Anatomy & Protocols for Abdominal Ultrasound, wyd. Wolters Kluwer Health, 2019; 3) Berthold Block, Abdominal Ultrasound: Step by Step., wyd. Thieme, 2015; 4) John Christian Fox, Atlas for emergency ultrasound, wyd. Cambridge University Press, 2011

SUPPLEMENTARY LITERATURE

Course/module: Clinical Skills Labs 4 Fields of education:

Course status: facultative 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

4/8 Year/semester:

Type of course:

Classes, Laboratory classes

Number of hours per Classes: 21 semester/week: Laboratory classes: 9

Teaching forms and methods

Classes(K1, U1, U2, W1, W2, W3, W4, W5, W6): Practical skills: performing and interpretation of 12-lead ECG. , Laboratory classes(K1, U1, U2, W1, W2, W3, W4, W5, W6): Practical exercises: the student recognizes and visualizes the organs of the neck, abdomen and pelvis during ultrasound examination, interprets images based on individual clinical cases and learns the rules and technique of fine-needle and thick-needle

Form and terms of the verification results:

CLASSES: Colloquium practical - attendance at classes, performing and interpretation of ECG (K1, U1, U2, W1, W2, W3, W4, W5, W6); LABORATORY CLASSES: Colloquium test - Final test: test: 20 true / false questions and an OSCE practical test. To pass the course, it is necessary to pass the theoretical and practical parts with a score of not less than 66%. The assessment will be the arithmetic mean of the Ultrasound part and the ECG(null)

Number of ECTS

points:

Language of instruction:

English

Introductory courses:

anatomy, physiology, patophysiology, internal medicine, physical examination and history taking basics

Preliminary requirements:

knowlege from anatomy, physiology,patophysiology,internal medicine, physical examination and history taking basics

Name of the organizational unit offering the course:

Katedra Radiologii,

Person in charge of the course:

dr hab. n. med. Anna Żurada

Course coordinators:

Notes:

1) John McCafferty, James M Forsyth, Point of Care Ultrasound Made Easy, wyd. CRC Press, 2020; 2) Sencha Alexander, Patrunov Yury N. Thyroid, Ultrasound. From Simple to Complex, wyd. Springer, 2019; 3) Malcolm S. Thaler, The Only EKG Book You'll Ever Need, wyd. Wolters Kluwer, 2015

Detailed description of the awarded ECTS points - part B

48SJ-CSL45 ECTS: 1

YEAR: 2023L

CLINICAL SKILLS LABS 4 CLINICAL SKILLS LABS 4

The awarded number of ECTS points is composed of:

1	Contact	hours with	the acade	emic teacher:
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- participation in: classes	21 h.
- participation in: laboratory classes	9 h.
- consultation	2 h.
	32 h.
2. Student's independent work:	
	1 h.
-	1 h.
	2 h.

1 ECTS point = 25-30 h of the average student's work, number of ECTS points = 34 h : 25 h/ECTS = 1,36 ECTS on average: **1 ECTS**

- including the number of ECTS points for contact hours with direct participation of the academic teacher:

1,28 ECTS points,

- including the number of ECTS points for hours completed in the form of the student's independent work:

-0,28 ECTS points,