

Course title: LABORATORY AND IMAGING DIAGNOSTICS

ECTS credit allocation (and other scores):1

Semester: autumn

Level of study: ISCED-6 - first-cycle programmes (EQF-6)

Branch of science: Medical and health sciences

Language: English

Number of hours per semester: 30

Course coordinator/ Department and e-mail: Blanka Wolszczak-Biedrzycka

Type of classes: classes and lectures

Substantive content

CLASSES: 1. Taking material for research, types of diagnostic materials. 2. Laboratory and imaging diagnostics of kidney diseases. 3. The role of laboratory and imaging tests in the diagnosis of diseases of the digestive tract, liver and pancreas. 4. Laboratory and imaging tests in the diagnosis of heart diseases. 5. Laboratory and imaging diagnostics of cancers. 6. Laboratory and imaging diagnostics of hematological disorders. 7. Laboratory and imaging diagnostics of thyroid, hypothalamus and pituitary diseases.

LECTURES: 1. The role of laboratory diagnostics in the health care system. 2. Influence of preanalytical variability on the results of laboratory tests. Types of laboratory errors. 3. Laboratory tests in emergencies.

Learning purpose: The student knows the types of material collected for research, knows how to secure the material, knows what pre-laboratory factors affect the obtained results, knows how to interpret the results of basic laboratory tests, knows the possibilities and limitations of the usefulness of laboratory test results in emergency situations. He knows the basic imaging techniques.

On completion of the study programme the graduate will gain:

Knowledge: types of biological materials used in laboratory diagnostics and principles of sampling for research; theoretical and practical foundations of laboratory and imaging diagnostics; possibilities and limitations of emergency laboratory tests;

Skills: interpret laboratory and imaging results and identify the causes of deviations from the reference values; secure material for tests used in laboratory diagnostics;

Social Competencies: perceiving and recognizing one's own limitations and self-assessing educational deficits and needs

Basic literature: Hubbard J.D:"A concise review of clinical laboratory science"; Williams&Wilkins, 2010

Supplementary literature: Stedman: "Stedman's medical dictionary"; Williams&Wilkins, 2010

"Laboratory diagnostics with elements of clinical biochemistry" Dembińska-Kieć A., Naskalski J., Urban&Partner, 2009

"Patient samples to the laboratory" Woźniak M., Medfarm, 2012

"250 Laboratory Tests - When to order how to interpret", Caquet R., PZWL, 2007

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 2



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Student's independent work: 7