

Faculty of Biology and Biotechnology

Course title: DIAGNOSTIC METHODS IN HUMAN AND VETERINARY MEDICINE

ECTS credit allocation (and other scores): 2

Semester: autumn

Level of study: ISCED-7 - second-cycle programmes (EQF-7)

Branch of science: Natural sciences

Language: English

Number of hours per semester: 30 h.

Course coordinator/ Department and e-mail: Aleksandra Kurzyńska; Department of Animal Anatomy and Physiology;

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Type of classes: classes and lectures

Substantive content

CLASSES: Types of biological material for diagnostic testing. Principles of biological material collection, conducting basic diagnostic tests, quality control procedures, discussion of common lab errors, and causes of result deviations from reference values.

LECTURES: Basic overview of laboratory diagnostic methods, types of diagnostic material, and selected laboratory tests. Concepts of reference and abnormal values. Quality control in testing, factors affecting laboratory results, and new technologies in diagnostics and personalized medicine.

LEARNING PURPOSE: Raising awareness about diagnostic tests in recognizing physiological disorders of the body as well as of the complexity of the performed analyses and the interpretation intricacy of the results.

On completion of the study programme the graduate will gain:

KNOWLEDGE: student understands material types, collection methods, and diagnostic processes in the laboratory; knows devices and techniques for diagnostic parameter determination; understands procedures, reference values, and reasons for deviations in diagnostic results.

SKILLS: student prepares and presents team reports and interpret results; can share team responsibilities, calibrates equipment, and measures samples; explains result complexities, deviations, and suggests further actions.

SOCIAL COMPETENCIES: student is committed to continuous skill improvement; ready to conduct diagnostics safely; ready to collaborate, take on roles, and lead discussions.

Basic literature: Papadakis, Maxine A et al. Current Medical Diagnosis & Treatment 2023. New York, N.Y: McGraw-Hill Education LLC, 2023. Print.

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 32 h.

Student's independent work: 18 h.