

E-learning v praktikách z biofyziky

E-learning on practice of medical biophysics

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Multimedia support of experiments in practice of medical biophysics (MB) and e-learning courses determined for self-study and testing were launched at 3rd Medical Faculty of Charles University in Prague. E-courses and on-line support are now undergoing pilot testing in MB practice of first year medical students in the winter semester of 2010. On-line support was opened at Moodle portal, a free open-source PHP web application for producing modular internet-based courses. E-courses focused on theory related to practical experiments from MB were integrated into basic education of MB at our faculty. The Biophysical practice was completely rebuilt using new devices and setups for Physiotherapy, Ophthalmology, Electrophysiology, Ergometry and Thermo vision. Whole practical exercises of MB are now realized in different experiments on thermal effects of ultrasound therapy coupled with thermo vision imaging technique, ergometry with special focus on ECG and blood pressure measurement, biosignals recording, electro-therapy with focus on recording of rheobase and chronaxy, optometry and ophthalmology, spectrometry of gamma radiation and half-thickness of materials in radiology, audiometry and bioimpedance measurement. After implementation of pilot test outputs, the whole on-line support of biophysical practice will be shared with all medical faculties in the MEFANET network.