

## **Moodle v praktické výuce lékařské biofyziky a ohlas studentů**

### **Moodle in practical classes of Medical Biophysics and response of students**

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Presentation describes new conception of practical classes from Biophysics at Medical Faculty in Hradec Kralove and its evaluation by students. Newly designed concept of practical classes tries to simulate a real system of the medical treatment in a hospital. Students have two virtual roles that include the role of patient and the role of physician. All study materials (instructions and theoretical background to laboratory exercises, empty protocols in the form of self-checked excel sheets) are accessible for students in the LMS Moodle. Study materials are prepared in the form of adaptive e-learning courses. Adaptive means that the student can choice several levels of interpretation according to the level of knowledge. Continuous preparation of students for practical classes is verified by on-line test of multiple choice questions in Moodle at the beginning of all laboratory classes. Students have to pass five practical exercises that include Ultrasound imaging, Computer tomography, Electrocardiography, Senses, and Nitinol. All labs except Nitinol simulate basic noninvasive examination and imaging methods. Students can practice the inspection of real patient (student) in virtual medical office and so improve their practical skills. We verified the contributions and the learning outcomes of the new concept qualitatively by using an on-line questionnaire. The questionnaire was accessible to all students from the first year of study during the examination period of the winter term in school years 2008 and 2009. Completion of the questionnaire was free and voluntary. The questionnaire consisted of 38 multiple choice questions. Four of them were focused on the new concept of practical education and training; six of them focused on the impact of practical exercises. Results of the questionnaire will be presented.