## ABSTRACT

Title of the project: Compensatory exercising by Lumbosacralis syndrome

**Purphose of the project:** Main load of the graduation theses is analysis and documentation of effects functional breathing exercises and balance compenzation by fit-ball by the help of logging dates from each informant, by physical metering (posture, checkup dynamic of spina column, muscular testing) and by mental characteristic (questinnaire about modification of pain).

**Methodology:** Used methods result from principle quantitative experimentation. Research was intent on obtaining objektive proofs by means of input and output investigation and questionnaire. Constitute experimentation was interfacing functional breathing exercises and balance compenzation with fit-ball. Finally interpratation and confrontation of obtained dates.

**Findings:** It has benn confirmed, that the application of functional breathing exercises and balance compenzation make for pains palliation and palliation of muscles disbalance in part of lumbar spine by monitored subjects. These changes went to a better feeling fitness and positively demonstrated in activities of daily living.

**Key words:** Lumbosacralis syndrome, functional breathing exercises, balance compenzation by fit-ball.