

## **Abstract**

**Title:** Axial system straining during martial arts and after care compensation of injuries

**Objective:** The main goal of this diploma thesis is to bring complex view on injuries of axial system, which happend during martial arts. This thesis is going to define the injuries and offer an alternative compensation of these injuries. Furthermore, the focus is on summarizing current knowledge about this issue

**Methods:** The thesis is based on literary research and has an analytical-descriptive character. The studies used meet predetermined criteria. The work is divided into several parts. The first part, called the theoretical background, focuses on the description of combat, further analyzes the axial system of man and also the biomechanics of the components of the axial system. The next part discusses the load of the axial system in the fights. After that, the work deals with injuries in combat.

**Results:** Based on the findings of individual studies, it can be said that the vast majority of all injuries incurred during judo and Brazilian jiu jitsu are orthopedic. Large joints were most affected by the injury. Injuries within the axial system occurred rather sporadically and were mostly head and cervical spine injuries.

**Keywords:** axial system, axial system injuries, fights, judo, Brazilian jiu jitsu, combat in combat, physiotherapy in combat