Information from departments

Organizational structure consists of the Dean's Office, Section of Pedagogy and Science, Technical Section and Business Section.

Dean's Office

The Dean's Office is the managerial and directive board of the Faculty. Its members are responsible for functioning of particular sections and departments. The Dean is at the head of the office. The other members are Vice-Dean for Study, Vice-Dean for Science, Vice-Dean for Foreign Affairs and Vice-Dean for Development. The advisory board (Collegium) is the Dean's consulting body.

Section of Pedagogy and Science

This section includes three major divisions: the Division of Humanities, Division of Sports and Division of Bio-Medicine. These divisions associate related departments and research centres. The Department of Military Physical Education forms an independent part of this section.

Division of Humanities

Major subjects (1). Major research topics (2).

Department of Kinanthropology, Humanities and Sport Management

- 1. Anthropomotorics; Kinanthropometry; Measurement in sport and physical education; Recreation; Philosophy of Sport; Sociology of Sport; Sports management; History of sport and Olympic Games.
- 2. Philosophical contingency of kinanthropology; Contribution of physical recreational activities to health-related fitness and life style; Motor regimens; Sport and physical education development at different stages of human society; Development of human kinetics; Somatic predispositions for physical performance and development; Testing and measurement.

Department of Pedagogy, Psychology and Didactics

- 1. Pedagogy; Sports pedagogy; Psychology; Educational psychology; Exercise psychology; Sports psychology; Sports Training; Physical education at school; Didactics of school physical education; Motor learning.
- Effectiveness of the physical education process; Motor learning improvement; System conception of sports training; Psychological aspects of physical activities in various social situations; Determinants of motivation towards physical activities.

Department of Student Teaching

- 1. Student teaching in schools and sport clubs.
- 2. Development of professional skills and behaviour of physical education teachers and coaches.

Department of Foreign Languages

- 1. English; German; French; Spanish; Russian.
- 2. Foreign language terminology in physical education and sport.

Division of sport

Major subjects (1). Major research topics (2).

Department of Track-and-Field Athletics

- 1. Theory and didactics of track and field athletics; Track and field specialisation.
- 2. Structure of track and field performance at various performance levels; Development, management and effectiveness of track field training process; Health-related recreational athletics.

Department of Gymnastics

- 1. Theory and didactics of general, artistic, rhythmic and sport (apparatus) gymnastics; Gymnastics specialisation; Theory and didactics of movements composition; Competitive body building.
- Health-related gymnastic exercises; Determinants of gymnastic performance; Training process; Analysis of didactic interaction; Aesthetic function of movement composition; Intervention effects upon the behaviour of a teacher and coach.

Department of Swimming

- 1. Theory and didactics of swimming and lifesaving; Introduction to diving, water polo and synchronized swimming.
- 2. Characteristic features of motor learning in swimming related to the age, coordination skills, muscle strength and flexibility; Compensating effect of swimming activities in people with disabilities.

Department of Sport Games

- 1. Theory and didactics of sport games (basketball, football, handball, ice-hockey, softball, tennis, volleyball); Specialisation in sport games.
- 2. Function of sport games in school physical education; Motor learning of sport game skills; Configuration of conditions of the training process based on synthesis of didactic technology and bio-technology; Teaching and coaching; Analysis of didactic interaction.

Department of Outdoor Sports

- 1. Theory and didactics of outdoor sports; Sport tourism; Outdoor sport specialisation.
- 2. Training in outdoor sports (alpine and nordic skiing, bicycling, flat and white-water canoeing, mountaineering, orienteering, rowing, windsurfing); Training programme in outdoor leadership; Environmental, outdoor and adventure education.

Department of Technical and Combat Sports and Martial Arts

- 1. Theory and didactics of sport flying, paragliding, shooting, biathlon, sport diving, automobile and motorcycling sports, martial arts and combat sports.
- 2. Configuration of conditions of effective training process in technical sports and martial arts.

Sport research centre

Physical activity regimens in sport training, health-related physical fitness, prevention and rehabilitation; Computer technique in diagnostics of neuromuscular functions and human motor functions; Two and three-dimensional kinematical analysis of motor patterns; Identification of the sport efficiency potential and trainability; Motor functions modelling; Application of Biomechanics and mathematic models to sport training process.

Division of Biomedicine

Major subjects (1). Major research topics (2).

Department of Anatomy and Biomechanics

- 1. Anatomy; Biomechanics; Biomechanics of the Musculoskeletal System; Sports Biomechanics; Principles of Biology.
- Morfological, kinesiological and biomechanical principles of musculoskeletal system and human motor patterns; Methodological aspects of analysis of sport motor patterns, occupational patterns and adopted motor patterns of people with disabilities; Loading and functional aspects of the main structural components of the musculoskeletal system.

Department of Physiology and Biochemistry

- 1. General and Exercise Physiology; Biology of a Child; Biochemistry; Biochemical principles in general biology.
- 2. Exercise effects on acute and adaptive physiological changes in human organism; Morpo-functional and biochemical characteristics of human skeletal muscles; Physical activity effects on ontogenetic development of children; Primary and secondary prevention from cardiovascular diseases.

Department of Sport Medicine and Adapted Physical Education

- 1. Sports Medicine; Adapted Physical Education; First Aid; Physical Activity Programs for people with or without disabilities.
- 2. Nutrition Principles; Sports Nutrition; Biostimulation; Injury Prevention; Health Promotion; Physical Fitness.

Department of Physiotherapy

- 1. Physical Therapy; Examination and Basic Therapeutic Methods; Rehabilitation; Manual Methods in Physiotherapy; Orthopaedic Prosthetics; Neurology; Clinical Neurophysiology; Kinesiology; Proprioceptive Neuromuscular Facilitation; Reflex Massage.
- 2. Kinesiology and Pathokinesiology of Musculoskeletal System.

Biomedical Laboratory

- 1. Exercise Physiology, Physiology of Sports, Sports Nutrition, Clinical Nutrition
- 2. Health and biomedical consequences of movement and physical activities. Morphological, functional, metabolic and biochemical determinants of movement and physical activity. Organism's response to physical activities and exercise exertion; Functional and biochemical laboratory diagnostics and field exercise testing methods; Clinical and Sports Nutrition; Body composition and Sport Anthropometry; Borderlines of health and disease in human organism, their diagnostics and possibilities to alter them positively by selected biomedical interventions.

Military Science Department

The purpose of the Military is to prepare qualified Faculty students to become commissioned officers in the Czech army. The primary focus is the development of leadership, management skills, theory and didactics in the army physical education and sport