Study programme: Undergraduate Academic Studies / Bachelor with Honours in Sport and Physical Education

Subject name: BIOMECHANICS / OA20

Teacher/Teachers: Borislav Obradović, PhD

Subject status: Mandatory

ECTS credits: 3

# Requirements: None

### Subject aim

Studying biomechanics of human movements with the accent on teaching physical education, training, rehabilitation, injury prevention and improvement of movement

# Subject outcome

Students will understand and master the principles of mechanics and their impact on the movement of humans; they will be able to analyse the relevant motor and movement structures very well; they will acquire the knowledge and ability to apply the course content both in teaching and training activities.

#### Subject content

# Theory

Kinematic terms for movement analysis, Kinematic terms for movement analysis, Liner kinematics of human movement, Liner kinematics of human movement, Angular kinematics of human movements, Angular kinematics of human movements, Liner kinematics of human movement, Liner kinematics of human movement, Angular kinematics of human movements, Balance and movement of man, Fluid movement of man, Fluid movement of man.

Practice

Statics, Linear kinematics, Linear kinetics, Angular kinetics, Fluid movement.

### Literature

- 1) Opavsku, P. (1976). Osnove biomehanike. Beograd: Naučna knjiga.
- 2) Hall, S.J. (2003). Basic biomechanics. New York: McGraw-Hill Higher Education
- 3) Whiting, W.C., Rugg, S. (2006). Dynatomy Dynamic Human Anatomy. Champaign, IL: Human Kinetics
- McGinnis, P.M. (2005). Biomechanics of Sport and Exercise 2nd Edition. Champaign, IL: Human Kinetics

Number of active teaching classes	Theory: 2	Practice: 1	
Teaching methods		· · ·	
Lectures, exercises, consultations, ex	tracurricular activit	ties	
Knowledge assessment (maximum	number of points	is 100)	
Pre-exam requirements	points	Final exam	points
engagement in class activities		written exam	55
practice	30	oral exam	
term test(s)	15	field work	