Name of the course: STATISTICS IN PHYSICAL EDUCATION AND SPORT

Teacher(s): Dragan Mirkov, Sladjan Milanovic, Knezevic Olivera

Course status: Compulsory

Number of ECTS points:15

Requirement: None

Course objective:

Understanding the basics of collection, processing, and analysis of biomechanical and physiological signals. To enable students to adopt advanced theoretical concepts and practical procedures used in data analysis, processing, and evaluation in the research related to physical education and sports.

Outcome of the course:

After completing the course, students should be able to:

- use of more advanced tools for statistical analysis.
- independent collection of valid data for later statistical processing.
- Selection of appropriate statistical procedures based on a practical or research problem.
- Valid interpretation and illustration of the results obtained after the applied statistical procedures.

Content of the course:

Measurement, statistics, research; organization and graphical presentation of data; measures of central tendency and dispersion; normal distribution curve; basics of statistical reasoning; correlations and regressions; comparison of arithmetic means of two data groups; comparison of arithmetic means of three or more groups of data; reliability measures; covariance factor analysis; analysis of nonparametric data; clinical association measures; more advanced statistical procedures

Recommended literature

- 1. Weir, J. P., & Vincent, W. J. (2021). *Statistics in kinesiology*. Champaign, IL: Human Kinetics Books.
- 2. Field, A. P. (2018). Discovering statistics using IBM SPSS/R statistics. London: SAGE.
- 3. Online Course material

Number active classes	Theory: 4	Practice:	
Course delivery methods			
Lectures; Work in small gro	oups, Homeworks		
	• • • •		
Knowledge assessment (maximum number of points 100)			
Class Activity: 10			
Seminar: 50			
Written Exam: 20			
Oral Exam: 20			
Testing ways may vary: (with	ritten exams, oral exams,	project presentations, seminars, etc)	