Study program: **Physical Education and Sport**

Type and level of studies: Basic academic studies

Course title: INTRODUCTION TO RESEARCH METHODS AND STATISTICS

Lecturer or lecturers (for lectures): Mirkov M. Dragan; Nedeljković Č Aleksandar

Lecturer / Associate (for practice):

Course status: Obligatory

ECTS: 3 Condition: None

Course objectives:

To introduce basic concepts of:

empirical reasoning; deriving a verifiable research idea; selecting data collection methods; determining reliability and validity; using descriptive statistics; standard normal distribution, relationships between variables; experimental control, experimental designs.

Course outcome:

After successfully completing this course, students are expected to:

- Be able to objectively analyze research papers and create independent thinking;
- Have basic knowledge on different types of research questions and research designs;
- Have basic knowledge on quantitative and qualitative research methods, as well as relevant ethical considerations.

Contents description:

Theoretical instruction

The Research Process; The Nature and Purpose of Research; The Research Problem; Searching the Literature; Developing the Research Plan; Ethical Concerns in Research; Selection of Research Participants: Sampling Procedures; Reading and Evaluating Research Reports; Types of Research; Data Collection and Analysis (Descriptive and Inferential Data Analysis); The Research Report *Practical classes:*

Search Engines; Electronic databases (Search strategies; PubMed; KoBSON; Google Scholar); Reading research Papers; Data collection (Sampling strategies); Measures of Central tendency; Measures of dispersion; Relative measures (Z-values, Quartiles; Deciles; Percentiles); Correlations and regressions; Testing for differences (independent and dependent samples)

References:

Dragan Mirkov, Primena informacionih tehnologija u fizičkom vaspitanju i sportu, prvo izdanje (IT Technologies in Sport and Physical Education, 1st Ed.), Belgrade, FSFV, 2013;

Turban, E., et al,. Introduction to Information Technology, 3rd Edition, Wiley, 2005.

No. of active classes					Other classes:
Lectures:	Exercises/	Other forms of teaching:		Study research	
2	Practical classes:	_		work:	
	1				
Teaching method					
Theoretical lectures; practical lectures					
Knowledge assessment (maximum score 100)					
Exam prerequisites		points	Final examination		points
Class Activities		5	Written examination		28
Practical instruction		5	Practical examination		
Preliminary exam / Colloquium		48	Oral exar	nination	20
Seminar papers					