UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Predmet:	Metode kineziološkega raziskovanja 1
Course title:	Reaserch Metods in Kinesiology 1

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Doktorski študijski program		**1**	**1**
Doctoral study program		**1**	**1**

Vrsta predmeta / Course type Obvezni/core course

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
30	**15**	**15**		**65**		**5**

Nosilec predmeta / Lecturer: prof.dr. Anuška Ferligoj

Jeziki / Languages:		
	Predavanja / Lectures:	**Slovenski/Slovene**
	Vaje / Tutorial:	

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Izpolnjevanje pogojev za vpis na doktorski študij Kineziologija in absolviran vsaj en dodiplomski predmet iz statistike (z vsaj 4 KT) in en predmet iz metodologije raziskovanja (z vsaj 4 KT).

Prerequisits:

General conditions for enrolment into the Doctoral Programme of Kinesiology and having passed at least one course on statistics (with at least 4 ECTS credits) and one course on research methodology (with at least 4 ECTS credits) at the undergraduate level.

Vsebina:

I. Raziskovalni proces:
- formulacija problema
- raziskovalni načrt
- sekundarni in primarni podatki
- načrtovanje vprašalnika
- merjenje ter zanesljivost in veljavnost merjenja
- načrtovanje vzorcev
- zbiranje podatkov

II. Statistična analiza podatkov:
- Osnovna inferenčna analiza podatkov
- Pregled multivariatnih metod
- Grafična predstavitev multivariatnih podatkov
- Razvrščanje v skupine
- Metoda glavnih komponent
- Več razsežnostno lestvičenje

Content (Syllabus outline):

I. Research process:
- problem formulation,
- research plan,
- secondary and primary data,
- planning of a questionnaire,
- measurement and its reliability and validity,
- planning of samples,
- data collection.

II. Statistical data analysis:
- basic inferential data analysis,
- overview of multivariate methods,
- graphical presentation of multivariate data,
- classification in groups,
- method of principal components,
- multidimensional scaling,
- multiple regression,
- factor analysis,

- Multipla regresija - Faktorska analiza - Diskriminantna analiza - Linearni strukturni modeli	– discriminant analysis, linear structural models.

Temeljni literatura in viri / Readings:

Tenenbaum G., M.P. Driscoll: Methods of Research in Sport Sciences. Meyer & Meyer Sport, Oxford, 2005.

Neuman, W.L.: Social research Methods: Qualitative and quantitative approaches. Boston: Pearson Education, 2006

Ferligoj A.: Razvrščanje v skupine. Metodološki zvezki 4, Ljubljana: FSPN, 1989.

Johnson R.A., Wichern D.W.: Applied Multivariate Statistical Analysis. New Jersey: Prentice Hall, 1988 (ali novejša izdaja)

Cilji in kompetence:	**Objectives and competences:**
V tem okviru se želi usposobiti študente: – za izbiro metodološkega pristopa, ki ustreza raziskovalnim ciljem in hipotezam ter drugim okoliščinam, – za razumevanje temeljnih konceptov izbranih statističnih metod, – za samostojno obdelavo podatkov z obravnavanimi metodami na osebnih računalnikih, – za pravilno razlago dobljenih rezultatov.	Within the above-mentioned framework, train students to: – choose the methodological approach that corresponds to the research objectives, hypotheses and other circumstances, – understand the basic concepts of the selected statistical methods, – independently process data using the studied methods on a personal computer, adequately explain the obtained results.

Predvideni študijski rezultati:	**Intended learning outcomes:**
Znanje in razumevanje: Usposobiti študente za pravilno uporabo metodoloških in statističnih pristopov, zlasti multivariatnih, ki se pogosto uporabljajo v raziskovanju na področju kineziologije.	Knowledge and understanding: Train students to correctly employ methodological and statistical approaches, especially the multivariate ones which are frequently employed in kinesiological research.

Metode poučevanja in učenja:	**Learning and teaching methods:**
Študentje osvojijo osnovna znanja na predavanjih (v primeru manjšega števila študentov deloma tudi z individualnim študijem pod mentorstvom učitelja). Na vajah si ogledajo konkretne primere in njihovo reševanje s pomočjo programskih orodij (predvidena je uporaba SPSS). Pridobljeno znanje utrdijo z izdelavo sprotnih domačih nalog ali projektnega dela, vezanega na njihov doktorski študij. Eno od tem, ki je povezana z njihovo disertacijo, podrobneje preučijo s samostojnim študijem ob pomoči mentorja in izdelavo seminarske naloge, ki se javno predstavi.	Students gain basic knowledge of the subject during classes (in case of a smaller number of enrolled students, individual study under the supervision of the lecturer is foreseen). During exercises, concrete cases will be analyzed and solved with adequate statistical software (ie. SPSS). Knowledge gained during courses will be consolidated with homework or project work related to their PhD. Each student will–under the supervision of the lecturer–study part of his PhD and present it as a form of seminar work.

Načini ocenjevanja:	Delež (v %) / Weight (in %)	**Assessment:**
Način (pisni izpit, ustno izpraševanje, naloge, projekt) Spremlja in ocenjuje se aktivnost študenta na organiziranem delu procesa (predavanje, vaje), izdelava pisnih izdelkov (domače naloge, vaje, projektno delo), vodenje seminarja in zagovori domačih nalog.	**100 %**	Type (examination, oral, coursework, project): The assessment encompasses the students' class work (during lectures and exercises), their written homework (including project work), and the homework and seminar presentation.

Reference nosilca / Lecturer's references:

FERLIGOJ, Anuška, BATAGELJ,Vladimir: Clustering with relational constraint. Psychometrika, 1982, vol. 47, no. 4, 413-426.

FERLIGOJ, Anuška: Clustering with constraining variable. Journal of Mathematical Sociology, 1986, vol. 12, 299-313.

FERLIGOJ, Anuška, BATAGELJ,Vladimir: Direct multicriteria clustering algorithms. Journal of Classification, 1992, vol. 9., no. 1, 43-61.