UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Predmet:	Kvantitativna metodologija 1
Course title:	Quantitative Methodology 1

Študijski program in stopnja **Study programme and level**	**Študijska smer** **Study field**	**Letnik** **Academic year**	**Semester** **Semester**
Uporabne družbene študije Socialni menedžment Psihosocialna pomoč	**/**	**2.**	**3.**
Applied Social Studies Social Management Psychosocial counseling	**/**	**2.**	**3.**

Vrsta predmeta / Course type	Obvezni / Mandatory
Univerzitetna koda predmeta / University course code:	ST1

Predavanja **Lectures**	**Seminar** **Seminar**	**Vaje** **Tutorial**	**Klinične vaje** **work**	**Druge oblike študija**	**Samost. delo** **Individ. work**	**ECTS**
30		**15**	**30**		**135**	**7**

Nosilec predmeta / Lecturer:	doc. dr. Jana Suklan

Jeziki / Languages:	**Predavanja / Lectures:**	**Slovensko / Slovenian, Angleško / English**
	Vaje / Tutorial:	**Slovensko / Slovenian, Angleško / English**

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisits:**
Študent/študentka mora pred pristopom k izpitu pripraviti in zagovarjati projekt.	Student must, before entering the exam, prepare and defend the project.

Vsebina:	**Content (Syllabus outline):**

- Opredelitev osnovnih pojmov: populacija, vzorec, statistična spremenljivka, parameter populacije. - Statistično proučevanje množičnih pojavov: popis, registracija, vzorčenje. - Relativna števila: strukture, koeficienti, indeksi. - Urejanje in prikazovanje opisnih spremenljivk: frekvenčna porazdelitev, izbira primernega grafikona. - Urejanje in prikazovanje številskih spremenljivk: ranžirna vrsta, frekvenčna porazdelitev, izbira primernega grafikona. - Mere centralne tendence: aritmetična sredina, mediana, modus, geometrijska sredina, kvantili. - Mere variabilnosti: absolutne (variacijski razmik, kvartilni razmik, varianca, standardni odklon) in relativne (koeficient variacije). - Korelacija in regresija: Pearsonov in Spearmanov koeficient korelacije (pomen, izračun, pogoji uporabe), parcialna in multipla korelacija, enačba regresijske premice, determinacijski koeficient. - Longitudinalno raziskovanje: analiza časovnih vrst (prikazovanje, indeksi, stopnje rasti), analiza trendov (drseče sredine, linearni trend). - Demografska statistika: analiza demografskih procesov, rast in obnavljanje prebivalstva, projekcije prebivalstva, splošni razvoj prebivalstva. - Uporaba sodobnih računalniških orodij za statistično analizo: urejanje in prikazovanje podatkov, izračun vseh pomembnih parametrov.	- Definition of basic concepts: population, sample, statistical variables, the parameter of the population. - Statistical study of mass phenomena: inventory, registration and sampling. - Relative numbers: structure coefficients indices. - Editing and displaying descriptive variables: frequency distribution, selecting an appropriate chart. - Editing and displaying numeric variables: shunting type, frequency distribution, selecting an appropriate chart. - Measures of central tendency: arithmetic mean, median, mode, geometric mean, quantil. - Dimensions of variability: absolute (variation interval, interquartile range, variance, standard deviation) and relative (coefficient of variation). - Correlation and regression Pearson and Spearman's rank correlation coefficient (meaning, calculation conditions of use), partial and multiple correlation equation regression lines, coefficient of determination. - Longitudinal Research: time series analysis (displaying, indexes, growth rates), trend analysis (moving average, linear trend). - Demographic Statistics: analysis of demographic processes, growth and regeneration of the population, population projections, the overall development of the population. - Use of advanced software tools for statistical analysis: editing and displaying data, calculating all relevant parameters.

Temeljni literatura in viri / Readings:

Macur, M. (2009): Statistika 1. Ljubljana; Vega.
Ferligoj, A. (1997): Osnove statistike na prosojnicah. Ljubljana; samozaložba.
Pustavrh, S.; Povh J., Vidiček, M. in Govorčin, J. (2011): Zbirka rešenih nalog iz statistike. Ljubljana: Vega.
Pfajfar, L. (2011): Osnovna statistika za ekonomske in poslovne vede. Ljubljana: Ekonomska fakulteta.
Triola, F. M. (2004): Elementary statistics. Ninth edition. Pearson Education.

Cilji in kompetence:

Cilj: Pridobiti osnovna znanja in veščine za zbiranje, urejanje in opis podatkov

Učna enota prispeva k razvoju naslednjih splošnih in predmetnospecifičnih kompetenc:

- seznanjenost z raziskovalnimi metodami, postopki in procesi, sposobnost zbiranja in interpretiranja podatkov, razvoj kritične in samokritične presoje,
- seznanjenost in razumevanje ter vrednotenje raziskovalnih metod, relevantnih za vse modalitete ter tistih, ki so specifične za izbrano modaliteto,
- sposobnost zbiranja in interpretiranja ustreznih podatkov, potrebnih za oblikovanje kritične ocene (npr. glede potrebne psihosocialne intervence), katere sestavni del je refleksija s tem povezanih družbenih, strokovnih in etičnih vidikov;

Objectives and competences:

Objectivs: To acquire basic knowledge and skills for the collection, analysis and description of the data.

Learning Unit contribute to the development of the following general and subject specific competences:

- Familiarity with research methods, procedures and processes, ability to collect and interpret the data, the development of critical and self-critical assessment,
- Awareness and understanding and evaluation of research methods relevant for all modalities as well as those specific to the selected modality,
- - Ability to collect and interpret relevant data necessary for the formation of a critical assessment (eg. regarding the necessary psychosocial interventions), a part of which is a reflection of the underlying social, professional and ethical aspects;

Predvideni študijski rezultati:

Študentje:

- se seznanijo s teoretskimi osnovami statističnih metod in s praktičnimi vidiki statističnega opazovanja množičnih pojavov;
- se usposobijo za začetno fazo statistične analize: definicija problema, določitev aktualnih statističnih spremenljivk, pridobivanje podatkov, urejanje in prikaz podatkov, izračun najpomembnejših parametrov;

Intended learning outcomes:

Students:

- Get acquainted with the theoretical basis of statistical methods and practical aspects of statistical observation of mass phenomena;
- Are trained for the initial phase of statistical analysis: definition of the problem, identification of the relevant statistical variables, data acquisition, editing and displaying data, calculation of the most important parameters;

- se naučijo uporabljati nekaj najaktualnejših programskih orodij za osnovno statistično obdelavo podatkov.	- Learn how to use some of the modern software tools for basic statistical data processing

Metode poučevanja in učenja:	**Learning and teaching methods:**
Predavanja z aktivno udeležbo študentov (razlaga, vprašanja, primeri); Vaje, kjer bodo študentje pri konkretnih statističnih problemih ponovili, utrdili in dodatno osvetlili pojme in metode, spoznane na predavanjih; Vaje v računalniški učilnici: pri teh vajah bodo študentje spoznali nekaj najaktualnejših programskih orodij za statistično obdelavo podatkov, s katerimi se bodo naučili izvajati vse statistične metode, ki so jih srečali na predavanjih in vajah. Te vaje bodo potekale v manjših skupinah, tako da bo imel vsak študent na razpolago en računalnik. Projekt, ki ga bodo študentje pripravili v manjših skupinah. Vključeval bo konkreten statistični problem, ki ga bodo morali študentje v celoti rešiti z metodami, spoznanimi na predavanjih in vajah. Kolokviji: z njimi bodo študentje stimulirani, da sproti študirajo snov, ki bo obravnavana na predavanjih in vajah.	Lectures with the active participation of students (explanation, questions, examples); Exercises where the students with the use of the concrete statistical problems recur, consolidate and shed further light on concepts and methods, learned on the lectures; Exercises in the computer room: with these exercises, students will learn about modern software tools for statistical data processing. With the use of these tools, students will learn to carry out all statistical methods, they met at lectures and tutorials. These exercises will take place in small groups so that each student will have a computer at the disposal. The project, which will be prepared by students in small groups. It will include a concrete statistical problem that will have to be completely solved by students, using methods that they have learned in class and exercises. Colloquies: students will be encouraged to keep studying the material that will be discussed at lectures and tutorials.

Načini ocenjevanja:	Delež (v %) / Weight (in %)	**Assessment:**
Projekt, kolokvij pisni izpit Ocenjevalna lestvica – skladno s Pravilnikom o preverjanju in ocenjevanju znanja.	**50 %** **50 %**	Project, Colloquies Written examination Grading - in accordance with the Faculty's Rules of verifying and assessing knowledge

Reference nosilca / Lecturer's references:

SUKLAN, Jana. Modeliranje sinergij komunikacijskih poti integriranega trženjsko-komunikacijskega pristopa : doktorska disertacija. Ljubljana: [J. Suklan], 2016. 243 str., ilustr. http://dk.fdv.uni-lj.si/doktorska_dela/pdfs/dr_suklan-jana.pdf. [COBISS.SI-ID 286766336]

SUKLAN, Jana, ŽABKAR, Vesna. Modelling synergies between online and offline media. V: POVH, Janez (ur.). Applied modelling and computing in social science. Frankfurt am Main: PL Academic Research. cop. 2015, str. 81-87, ilustr. [COBISS.SI-ID 2048373267], [Scopus do 8. 4. 2017: št. citatov (TC): 0, čistih citatov (CI): 0]

KRESAL, Friderika, SUKLAN, Jana, ROBLEK, Vasja, JERMAN, Andrej, MEŠKO, Maja. Psychosocial risk factors for low back pain and absenteeism among Slovenian professional drivers. Central european journal of public health, ISSN 1210-7778, 2017, vol. 25, iss. 2, str. 135-140. [COBISS.SI-ID 1539453636], [JCR, SNIP, WoS do 30. 7. 2017: št. citatov (TC): 0, čistih citatov (CI): 0, Scopus do 4. 10. 2017: št. citatov (TC): 0, čistih citatov (CI): 0]

STOJANOVIĆ, Dragana, TOMAŠEVIĆ, Ivan, SLOVIĆ, Dragoslav, GOŠNIK, Dušan, SUKLAN, Jana, KAVČIČ, Klemen. B.P.M. in transition economies : joint empirical experience of Slovenia and Serbia. Ekonomska istraživanja, ISSN 1331-677X, 2017, no. 1, vol. 30, str. 1237-1256. http://www.tandfonline.com/doi/pdf/10.1080/1331677X.2017.1355256?needAccess=true, doi: 10.1080/1331677X.2017.1355256. [COBISS.SI-ID 1539594692], [JCR, SNIP]

KALAN, Mateja, RAZDEVŠEK, Martina, SUKLAN, Jana. Workplace mediation procedures : a case-study of transition economies. WSEAS transactions on business and economics, ISSN 2224-2899, 2017, vol. 14, str. 170-177. http://www.wseas.org/multimedia/journals/economics/2017/a385807-562.pdf. [COBISS.SI-ID 16517942], [SNIP, Scopus do 27. 10. 2017: št. citatov (TC): 0, čistih citatov (CI): 0]

JELOVAC, Dejan, ORLIĆ, Ranko, SUKLAN, Jana, SRŠEN, Cvetko. Organisational culture measurement : an empirical study of local and regional similarities and differences in case of Post of Slovenia ltd. Innovative issues and approaches in social sciences, ISSN 1855-0541, 2016, vol. 9, no. 2, str. 8-34, graf. prikazi, tabele. http://www.iiass.com/pdf/IIASS-2016-no2-art1.pdf. [COBISS.SI-ID 2048387091]

GOŠNIK, Dušan, BEKER, Ivan, SUKLAN, Jana, KAVČIČ, Klemen. Management model for successful business processes : the case of transition countries. International journal of industrial engineering and management, ISSN 2217-2661, 2016, vol. 7, no. 2, str. 75-83, ilustr., tabele. http://www.iim.ftn.uns.ac.rs/casopis/volume7/ijiem_vol7_no2_3.pdf. [COBISS.SI-ID 1538566340], [SNIP, Scopus do 27. 6. 2017: št. citatov (TC): 1, čistih citatov (CI): 1]

GOLOB, Tea, MAKAROVIČ, Matej, SUKLAN, Jana. National development nenerates national identities. PloS one, ISSN 1932-6203, 2016, vol. 11, no. 2, str. 0146584-1-0146584-14. http://www.plosone.org/article/fetchObject.action?uri=info:doi/10.1371/journal.pone.0146584&representation=PDF, doi: 10.1371/journal.pone.0146584. [COBISS.SI-ID 29291303], [JCR, SNIP, WoS do 19. 4. 2017: št. citatov (TC): 2, čistih citatov (CI): 1, Scopus do 31. 8. 2017: št. citatov (TC): 2, čistih citatov (CI): 1]

KAVČIČ, Klemen, SUKLAN, Jana, MILOST, Franko. Outsourcing logistics activities : evidence from Slovenia. Promet, ISSN 1848-4069. [Online ed.], 2016, iss. 6, vol. 28, str. 575-581.