

UČNI NAČRT PREDMETA / COURSE SYLLABUS**Predmet:** Kvantitativna metodologija 2**Course title:** Quantitative Methodology 2

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Psihosocialna pomoč, prva	/	2.	4.
Psychosocial counseling, first	/	2nd	4th

Vrsta predmeta / Course type

Obvezen/Mandatory or Izbirni/Elective (Optional)

Univerzitetna koda predmeta / University course code:

ST2

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
30		45			135	7

Nosilec predmeta / Lecturer:

doc. dr. Jana Suklan

**Jeziki /
Languages:****Predavanja /** Slovensko / Slovenian, Angleško / English**Lectures:****Vaje / Tutorial:** Slovensko / Slovenian, Angleško / English**Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:**

Opravljen predmet Kvantitativna metodologija 1 ali soroden predmet.

Prerequisites:

Completed course Quantitative Methodology 1 or a similar course.

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

- osnove verjetnostnega računa: klasična in statistična definicija verjetnosti, slučajne spremenljivke (diskretne in zvezne), teoretične porazdelitve (normalna porazdelitev, t-porazdelitev, F-porazdelitev,...)
- Anketno raziskovanje: načini vzorčenja (enostavni slučajni vzorec, sistematično vzorčenje, stratifikacija,...), načini anketiranja (osebno, telefonsko, spletno,...), oblikovanje anketnega vprašalnika, oblikovanje vzorčnega okvirja in obravnava neodgovorov.
- Ocenjevanje parametrov: točkovne in intervalne ocene za parametre statističnih spremenljivk, cenilka parametra.
- Ocenjevanje parametrov populacije s pomočjo velikih enostavnih slučajnih vzorcev: porazdelitev vzorčnih ocen, intervalne ocene za aritmetično sredino, delež populacije, varianco, Pearsonov koeficient korelacije. Načrtovanje velikosti vzorca. Ocenjevanje parametrov populacije s pomočjo malih enostavnih slučajnih vzorcev: porazdelitev vzorčnih ocen, intervalne ocene za aritmetično sredino in varianco.
- Preizkušanje statističnih domnev: postopek preizkušanja domnev, osnovna in ničelna domneva, napake pri preizkušanju domnev, preizkušanje domnev o aritmetični sredini in deležu ene ali dveh populacij, preizkušanje domnev o varianci ene ali dveh populacij, p vrednost testa.
- Bivariatna analiza: analiza povezanosti dveh opisnih spremenljivk nominalnega in ordinalnega značaja (test, mere stopnje kontingence, Spearmanov koeficient korelacije rangov, preizkušanje domnev o povezanosti), ugotavljanje linearne povezanosti dveh numeričnih spremenljivk (Pearsonov

- The basics of probability calculation: classical and statistical definition of probability, random variables (discrete and continuous), the theoretical distribution (normal distribution, t-distribution, F-distribution, ...)
- The usage of survey: sampling methods (simple random sampling, systematic sampling, stratification, ...), survey methods (in person, by phone, online, ...), designing questionnaires, the creation of the sampling frame and treatment of non-response.
- Estimation of parameters: point and interval estimates of parameters of statistical variables, the estimator of parameter.
- Estimation of the population parameters with large simple random samples: the distribution of sample estimates, interval estimates of the arithmetic average, the share of the population variance, Pearson correlation coefficient. Planning the sample size. Parameter Estimation of the population parameters with small simple random samples: the distribution of sample estimates, interval estimates of the arithmetic mean and the variance.
- Testing statistical hypotheses: the process of hypothesis testing, basic and null hypothesis, errors in testing hypotheses, testing hypotheses about the mean and the proportion of one or two populations, hypothesis testing about the variance of one or two populations, p value of the test.
- Bivariate analysis: analysis of the relationship of two descriptive variables nominal and ordinal character (test, measurements of the degree of contingency, Spearman's rank correlation coefficient rankings, connectivity hypothesis testing), determining the linear relationship of

koeficient korelacije, enostavna linearna regresija, koeficient determinacije, preizkušanje domnev o povezanosti).

- Uporaba sodobnih računalniških programov za statistično analizo: urejanje in prikazovanje podatkov, izračun vseh pomembnih parametrov, intervalne ocene parametrov, preizkušanje domnev.

two numeric variables (Pearson correlation coefficient, simple linear regression, coefficient of determination, testing assumptions about the relationship).

- The use of modern computer programs for statistical analysis: editing and displaying data, calculating all relevant parameters, interval estimates of parameters, hypothesis testing.

Temeljni literatura in viri / Readings:

Košmelj, B. in Rovan, J. (2003): Statistično sklepanje. Ljubljana: Ekonomska fakulteta.
Pustavrh, S.; Povh J., Vidiček, M. in Govorčin, J. (2011): Zbirka rešenih nalog iz statistike. Ljubljana: Vega.
Triola, F. M. (2004): Elementary statistics. Ninth edition. Pearson Education.

Cilji in kompetence:

Osnovna cilja:

1. Podrobnejše spoznavanje empiričnih metod in prikaz načrtovanja in poteka raziskave.
2. Oris osnovnih kvalitativnih metodoloških orodij in predstavitev razlik, podobnosti ter razmerja med kvalitativno in kvantitativno raziskovalno paradigmo.

Učna enota prispeva k razvoju naslednjih splošnih in predmetnospecifičnih kompetenc:

- poznavanje in razumevanje osnovnih konceptov in metod, seznanjenost z novostmi na področju študija
- 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,

Objectives and competences:

Primary objectives:

1. Detailed understanding of empirical methods and presentation of research planning and procedure.
2. Outline of the basic qualitative methodological tools and presentation of the differences, similarities and relationships between qualitative and quantitative research paradigm.

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

- Knowledge and understanding of basic concepts and methods, familiarity with innovations in the field of study
- Familiarity with research methods, procedures and processes, ability to collect and interpret the data, the development of critical and self-critical assessment,
- Familiarity, understanding and evaluation of research methods relevant for all modalities as well as those

- 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,
- sposobnost argumentiranega ter spoštljivega razpravljanja in reševanja problemov;

- specific to the selected modality,
- Ability to collect and interpret relevant data necessary for the formation of a critical assessment (eg. For the necessary psychosocial interventions), a part of which is a reflection of the underlying social, professional and ethical aspects,
 - The ability of argumentative and respectful discussion and problem solving;

Predvideni študijski rezultati:

- Demonstrirati znanje o načinih preverjanja hipotez v znanosti, o ocenjevanju parametrov z velikimi in malimi vzorci, o preizkušanju hipotez, o neparametričnih preizkusih, analizi variance.
- Spretnosti analize podatkov; varovanja podatkov; refleksivnost in kritičnost.
- Razumevanje posameznih za svetovanje in psihoterapijo relevantnih področij znanstvene metodologije.
- Demonstrirati pregled nad celotnim (osnovnim) spektrom raziskovalnih pristopov.
- Poznati ključne značilnosti standardnih metodoloških modelov in odnosa med njimi.

Intended learning outcomes:

- Demonstrate knowledge about the procedures for checking hypotheses in science, about the evaluation parameters with large and small samples, about the testing of hypotheses, about nonparametric tests and analysis of variance.
- The skills of data analysis; data protection; reflexivity and criticism.
- Understanding of individual counseling and psychotherapy relevant fields of scientific methodology.
- Demonstrate an overview of the whole (basic) spectrum of research approaches.
- Know the key features of the standard methodological models and the relationship between them.

Metode poučevanja in učenja:

Predavanja, vaje, individualne naloge, aktivno (refleksivno) poučevanje, vodeni individualni študij.

Learning and teaching methods:

Lectures, exercises, individual assignments, active (reflective) teaching, guided individual study.

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
Pisni izpit; praktična naloga (analiza podatkov), ustni izpit. (Opravljena praktična naloga je pogoj za pristop k pisnemu izpitu.)	100%	Written exam; practical task (data analysis), oral exam. (Completed practical task is a prerequisite for taking the written examination.)
Ocenjevalna lestvica – skladno s Pravilnikom o preverjanju in ocenjevanju znanja		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.