



UČNI NAČRT / COURSE SYLLABI

Študijsko leto 2017/2018

Predmet / Course	Analiza socialnih in ekonomskih omrežij / Analysis of Social and Economic Networks
Šifra predmeta / Course Code	B22ASEO6-MZ
Nosilec predmeta / Course Coordinator	doc. dr. Kristijan Breznik
Vrsta predmeta / Type of the course	obvezni/compulsory
Jezik / Language - Vaje / Tutorials - Predavanja / Lecture	Slovenski / Slovene, - Slovenski / Slovene, -
Študijski program / Programme	Management znanja (2. stopnja) / Knowledge management (2nd Cycle)
Letnik / Year	2.
Primarno študijsko področje / Primary Study Field	Matematika, metodologija, statistika in informatika (Klasius 46 in 48)
Pogoji za vključitev / Requirements	Opravljen predmet 'Raziskovanje v družboslovju' iz prvega letnika ali ekvivalenten predmet

Predavanja Lectures	Vaje Tutorials	Druge oblike študija Other Type of Study	Samostojno delo Individual work	Ure dela Work hours	ECTS
16	8	0	126	150	6

a) Vsebina / Content:

1. Uvod v omrežja 2. Definicija omrežij 3. Tipi omrežij 4. Primeri socialnih in ekonomskih omrežij 5. Načini prikazov omrežij 6. Program Pajek	1. Introduction to networks 2. Network definition 3. Types of networks 4. Examples of social and economic networks 5. Methods of network visualization 6. Program Pajek
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Splošne kompetence / General Competencies:

<i>Študent bo pridobil znanje in spretnosti na naslednjih splošnih vsebinskih področjih:</i> SPL1: Delo s podatki in informacijami; SPL2: Osnovne računalniške spretnosti; SPL8: Spretnosti kritičnega mišljenja;	<i>Student will acquire knowledge and skills in the following general areas:</i> SPL1: Work with data and information; SPL2: Basic computer skills; SPL8: Critical thinking;
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Predmetno specifične kompetence / Course Specific Competencies:

<i>Študent bo pridobil znanje in spretnosti na naslednjih specifičnih vsebinskih področjih:</i> PSP12: Informacijski sistemi in programska oprema na vsebinskem področju predmeta; PSP14: Tuj jezik na obravnavanem področju; PSP17: Matematika in statistika na vsebinskem področju predmeta; PSP18: Splošna razgledanost na vsebinskem področju predmeta.	<i>Student will acquire knowledge and skills in the following specific areas:</i> PSP12: Information systems and software in the fields of the course; PSP14: Foreign language in the fields of the course; PSP17: Mathematics and statistics in the fields of the course; PSP18: General overview of the course content area.
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Predvideni študijski izidi / Intended Learning Outcomes:

<i>Študent bo dosegel naslednje študijske izide:</i>	<i>Student will achieve the following learning outcomes:</i>
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1. Zna ustvariti mala in srednja omrežja 2. Pozna osnovne primere socialnih in ekonomskih omrežij 3. Razume osnovne elemente analize omrežij 4. Uporabi program Pajek za analizo omrežij 5. Zna prikazati omrežja	1. Knows how to create small and medium-sized networks 2. Knows basic examples of social and economic networks 3. Understands the basic elements of network analysis 4. Uses program Pajek for network analysis 5. Knows how to display network
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Oblike in metode poučevanja in učenja / Types and Methods of Teaching and Learning

Oblike dela	Frontalna oblika poučevanja; Delo v manjših skupinah; Samostojno delo študenta;
Types of Teaching and Learning	Frontal teaching; Work in smaller groups or pairs; Independent student work;
Metode dela	Razlaga; Razgovor/diskusija/debata; Reševanje nalog; Praktično delo;
Teaching and Learning Methods	Explanation; Conversation/discussion/debate; Solving exercises; Practical work;

Načini ocenjevanja v % / Types of Student Assessment

Sprotno ustno ocenjevanje / Oral Assessment	/
Sprotno pisno ocenjevanje / Written Assessment /	/
Daljši pisni izdelek /Longer written casework ¹	50 %
Javni nastop s predstavitevijo rezultatov / Presentations ² /	/
Končni pisni izpit / Final written examination	50 %
Končni ustni izpit / Final oral examination	/
Udeležba in sodelovanje / Participation and cooperation	/
Lestvica ocenjevanja / Grading scale	številska/numeric

Temeljna literatura / Literature:

1. Nooy, W. de, Mrvar, A., Batagelj, V. (2012). Exploratory social network analysis with Pajek (Second Edition). Cambridge: Cambridge University Press. 2. Jackson, M. O. (2010). Social and Economic Networks. Princeton: Princeton University Press. 3. Batagelj, V., Doreian, P., Ferligoj, A., Kežar N. (2014). Understanding Large Temporal and Spatial Networks. Chichester: John Wiley and Sons Ltd. 4. Wasserman, S., Faust, K. (1994). Social Network Analysis: Methods and Applications. Cambridge: Cambridge University Press.

Reference nosilca / Lecturer's references:

1. BREZNIK, Kristijan. Using social network analysis to identify innovation clusters. International journal of innovating and learning, ISSN 1471-8197, 2016, vol. 19, no. 3, str. 272-285, ilustr. <http://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijil>, doi: 10.1504/IJIL.2016.075654. [COBISS.SI-ID 38308869] 2. BREZNIK, Kristijan, ĐAKOVIĆ, Goran. Erasmus student mobility flows - the national-level social network analysis of Slovenia. International journal of innovating and learning, ISSN 1471-8197, 2016, vol. 20, no. 2, str. 124-137. <http://www.inderscience.com/offer.php?id=77843>, doi: 10.1504/IJIL.2016.077843. [COBISS.SI-ID 38610693] 3. BREZNIK, Kristijan, LAW, Kris. How social networks affect the learning performance among engineering students. Technics technologies education management, ISSN 1840-1503, 2015, vol. 10, no. 2, str. 191-203, graf. prikazi, tabele. [COBISS.SI-ID 13803681] 4. DERMOL, Valerij, TRUNK ŠIRCA, Nada, BABNIK, Katarina, BREZNIK, Kristijan. Connecting research, higher education and business : implication for innovation. International journal of Euro-Mediterranean studies, ISSN 1855-3362. [Print ed.], 2013, vol. 6, no. 1, str. 65-80, 101, 104-105, ilustr. [COBISS.SI-ID 12406689] 5. BREZNIK, Kristijan. On the gender effects of handedness in professional tennis. Journal of Sports Science and Medicine, ISSN 1303-2968. [Online

¹ Seminarska ali projektna naloga, raziskovalna naloga ipd.

² Plakat, naloga, prispevek

ed.], June 2013, vol. 12, iss. 2, str. 346-353, graf. prikazi, tabele. <http://www.jssm.org/vol12/n2/17/v12n2-17text.php>. [COBISS.SI-ID 11910561] 6. DERMOL, Valerij, BREZNIK, Kristijan. Innovation synergies through networking in Slovenian regions. *International journal of synergy and research*, ISSN 2083-0025. [Online ed.], 2012, vol. 1, no. 1, str. 39-55, graf. prikazi, tabele. http://ijsr.umcs.lublin.pl/wp-content/uploads/2012/05/IJSR_2012_Vol_001_No_001.pdf. [COBISS.SI-ID 15867445] 7. BREZNIK, Kristijan. Knowledge management with WoS network of citations. V: DERMOL, Valerij (ur.), TRUNK, Aleš (ur.), SMRKOLJ, Marko (ur.). *Managing innovation and diversity in knowledge society through turbulent time : proceedings of the MakeLearn and TIIM Joint International Conference, 25-27 May 2016, Timisoara, Romania, (MakeLearn, ISSN 2232-3309)*. Bangkok; Celje; Lublin: ToKnowPress, 2016, str. 1209-1215, graf. prikazi, tabele. <http://www.toknowpress.net/ISBN/978-961-6914-16-1/papers/ML16-275.pdf>. [COBISS.SI-ID 14512033] 8. BREZNIK, Kristijan, RAGOZINI, Giancarlo. Exploring the Italian Erasmus agreements by a network analysis perspective. V: *ASONAM 2015 : proceedings of the 2015 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, Paris, France, August 25-28, 2015, 2015 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, Paris, France, August 25-28, 2015*. [S. l.: s. n.], cop. 2015, str. 837-838, graf. prikazi. <http://dl.acm.org/citation.cfm?doid=2808797.2808864>, doi: 10.1145/2808797.2808864. [COBISS.SI-ID 13878945] 9. BREZNIK, Kristijan, GOLOGRANC, Gaja. Erasmus mobility on the institutional level. V: DERMOL, Valerij (ur.), SMRKOLJ, Marko (ur.), ĐAKOVIĆ, Goran (ur.). *Human capital without borders : knowledge and learning for quality of life : proceedings of the Management, Knowledge and Learning International Conference 2014, 25-27 June 2014, Portorož, Slovenia, Management, Knowledge and Learning International Conference 2014, 25-27 June 2014, Portorož, Slovenia, (MakeLearn, ISSN 2232-3309)*. Bangkok; Celje; Lublin: ToKnowPress, 2014, str. 1361-1366, graf. prikazi, tabele. <http://www.toknowpress.net/ISBN/978-961-6914-09-3/papers/ML14-762.pdf>. [COBISS.SI-ID 12940961] 10. BREZNIK, Kristijan. Identifying innovation clusters : the social network approach. V: *Proceedings of 2014 International Conference on Technology Innovation and Industrial Management : 28-30 May 2014, Seoul, South Korea, (Proceedings of 2010 International Conference on Technology Innovation and Industrial Management, ISSN 1906-7631)*. Seoul (South Korea): TIIM, 2014, str. S3-99-107, graf. prikazi. [COBISS.SI-ID 12871073]