



## UČNI NAČRT / COURSE SYLLABUS

Študijsko leto 2020/2021

<b>Predmet / Course</b>	Analiza socialnih in ekonomskih omrežij / Analysis of Social and Economic Networks
<b>Šifra predmeta / Course Code</b>	B22ASEO6-MZ
<b>Nosilec predmeta / Course Coordinator</b>	izr. prof. dr. Kristijan Breznik
<b>Vrsta predmeta / Type of the course</b>	obvezni/compulsory
<b>Jezik / Language</b> - Vaje / Tutorials - Predavanja / Lecture	Slovenski / Slovene, - Slovenski / Slovene, -
<b>Študijski program / Programme</b>	Management znanja (2. stopnja) / Knowledge management (2nd Cycle)
<b>Letnik / Year</b>	2.
<b>Pogoji za vključitev / Requirements</b>	Opravljen predmet 'Raziskovalne metode v družboslovju' iz prvega letnika ali ekvivalenten predmet

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

### 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>	<i>Student will acquire knowledge and skills in the following general areas:</i>
<b>SPL1:</b> Delo s podatki in informacijami; <b>SPL2:</b> Osnovne računalniške spretnosti; <b>SPL8:</b> Spretnosti kritičnega mišljenja;	<b>SPL1:</b> Work with data and information; <b>SPL2:</b> Basic computer skills; <b>SPL8:</b> Critical thinking;

### Predmetno specifične kompetence / Course Specific Competencies:

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

### Predvideni študijski izidi / Intended Learning Outcomes:

<i>Študent bo dosegel naslednje študijske izide:</i>	<i>Student will achieve the following learning outcomes:</i>
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

**Oblike in metode poučevanja in učenja / Types and Methods of Teaching and Learning**

<i>Oblike dela</i>	Frontalna oblika poučevanja; Delo v manjših skupinah; Samostojno delo študenta;
<i>Types of Teaching and Learning</i>	Frontal teaching; Work in smaller groups or pairs; Independent student work;
<i>Metode dela</i>	Razlaga; Razgovor/diskusija/debata; Reševanje nalog; Praktično delo;
<i>Teaching and Learning Methods</i>	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 <sup>1</sup>	50 %
Javni nastop s predstavitvijo rezultatov / Presentations <sup>2</sup> /	/
Končni pisni izpit / Final written examination	50 %
Končni ustni izpit / Final oral examination	/
Udeležba in sodelovanje / Participation and cooperation	/
<b>Lestvica ocenjevanja / Grading scale</b>	številaska/numeric

**Temeljna literatura / Literature:**

1. Nooy, W. de, Mrvar, A., Batagelj, V. (2018). Exploratory social network analysis with Pajek (Third Edition). Cambridge: Cambridge University Press.
2. Jackson, M. O. (2010). Social and Economic Networks. Princeton: Princeton University Press.
3. BREZNIK, K. (2016). Using social network analysis to identify innovation clusters. International journal of innovating and learning, 19(3), str. 272-285.

**Reference nosilca / Lecturer's references:**

- 1.01 Izvirni znanstveni članek**
1. BREZNIK, Kristijan, SKRBINJEK, Vesna. Citation network analysis of documents on engineering and technology education. Global journal of engineering education, ISSN 1328-3154, 2017, vol. 19, no. 3, str. 213-218, ilustr. <http://www.wiete.com.au/journals/GJEE/Publish/vol19no3/06-Breznik-K.pdf>. [COBISS.SI-ID 39336965]
  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, 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](http://ijsr.umcs.lublin.pl/wp-content/uploads/2012/05/IJSR_2012_Vol_001_No_001.pdf). [COBISS.SI-ID 15867445]
- 1.08 Objavljeni znanstveni prispevek na konferenci**
5. 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-

<sup>1</sup> Seminarska ali projektna naloga, raziskovalna naloga ipd.

<sup>2</sup> Plakat, naloga, prispevek

1215, graf. prikazi, tabele. <http://www.toknowpress.net/ISBN/978-961-6914-16-1/papers/ML16-275.pdf>.  
[COBISS.SI-ID 14512033]

6. 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]