

# INFORMACIJSKA TEHNOLOGIJA V JAVNI UPRAVI

## UČNI NAČRT PREDMETA/COURSE SYLLABUS

|                                   |                                                   |
|-----------------------------------|---------------------------------------------------|
| <b>Predmet:</b>                   | INFORMACIJSKA TEHNOLOGIJA V JAVNI UPRAVI          |
| <b>Course title:</b>              | INFORMATION TECHNOLOGIES IN PUBLIC ADMINISTRATION |
| <b>Članica nosilka/UL Member:</b> | UL FU                                             |

| Študijski programi in stopnja                                    | Študijska smer                  | Letnik    | Semestri    | Izbirnost |
|------------------------------------------------------------------|---------------------------------|-----------|-------------|-----------|
| Uprava - Upravljanje javnega sektorja, druga stopnja, magistrski | Ni členitve (študijski program) | 1. letnik | 1. semester | obvezen   |

Univerzitetna koda predmeta/University course code: 0576571

Koda učne enote na članici/UL Member course code: 2004

| Predavanja<br>/Lectures | Seminar<br>/Seminar | Vaje<br>/Tutorials | Klinične vaje<br>/Clinical<br>tutorials | Druge oblike<br>študija<br>/Other forms<br>of study | Samostojno<br>delo<br>/Individual<br>student work | ECTS |
|-------------------------|---------------------|--------------------|-----------------------------------------|-----------------------------------------------------|---------------------------------------------------|------|
| 28                      | 14                  |                    |                                         | 118                                                 | 80                                                | 8    |

Nosilec predmeta/Lecturer: Dimitar Hristovski, Tina Jukić

Vrsta predmeta/Course type: OBVEZNI/CORE

Jeziki/Languages:

|                      |                         |
|----------------------|-------------------------|
| Predavanja/Lectures: | Angleščina, Slovenščina |
| Vaje/Tutorial:       |                         |

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

Ni pogojev.

Prerequisites:

No prerequisites.

Vsebina:

1. Definicije in zgodovinski kontekst uvajanja IT v javni upravi, e-uprava
2. Fazni modeli uvajanja in razvoja e-uprave
3. Nacionalne strategije e-uprave
4. Učinki IT in vrednotenje e-uprave
5. Mednarodni okviri za vrednotenje e-uprave
6. Digitalni razkorak
7. Upravljalški pristop k vpeljavi IT v javni upravi
8. Portali »vse na enem mestu«
9. Interoperabilnostni okviri e-uprave
10. Participativni pristop k vpeljavi IT v javni upravi
11. E-participacija in e-vodenje
12. Odprta uprava in odprti podatki

Content (Syllabus outline):

1. Definitions, historical context of introducing IT in public administration, e-government
2. E-government stage models
3. E-government national strategies
4. Effects of IT and evaluating e-government
5. International frameworks for evaluating e-government
6. Digital divide
7. Managerial approach to introducing IT in public administration
8. One-stop-shop portals
9. E-government interoperability frameworks
10. Participative approach to introducing IT in public administration
11. E-participation and e-governance
12. Open government and open data

Temeljna literatura in viri/Readings:

1. Veit, D., Huntgeburth, J. (2014) *Foundations of Digital Government: Leading and Managing in the Digital Era*. Springer, Berlin. *Izbrana poglavja*, cca. 200 str.
2. Lee, J. (2010) 10 year retrospect on stage models of e-government: a qualitative meta-synthesis. *Government Information Quarterly* 27: 220-230.
3. Rabaiah, A., Vandijck, E. (2009) A strategic framework of e-government: generic and best practice. *Electronic Journal of e-Government* 7(3): 241-258.
4. Heeks, R. (2006) Understanding and Measuring eGovernment: International Benchmarking Studies. *UNDESA workshop, E-Participation and E-Government: Understanding the Present and Creating the Future*. Budimpešta, Madžarska. *Izbrani deli*, cca. 30 str.
5. Tinholt, D. in ost. (2014) Delivering the European Advantage? How European governments can and should benefit from innovative public services. Poročilo Evropske Unije. DOI: 10.2759/4919. *Izbrana poglavja*, cca. 80 str.
6. Mugellini, E., Pettenati, M.C., Khaled, O.A., Pirri, F. (2005) eGovernment Service Marketplace: Architecture and Implementation. *E-Government: Towards Electronic Democracy*, Springer: 193-204.

### Cilji in kompetence:

Cilji – študent zna:

- brati in razumeti zahtevno strokovno in znanstveno literaturo s področja e-uprave v angleškem jeziku
- uporabiti metodologijo vsebinske analize na korpusu aktualnih znanstvenih člankov in strokovnih besedil s področja e-uprave
- izbrati in uporabljati metodologije za vrednotenje e-uprave
- identificirati in uporabiti ustrezne pristope k strateškemu načrtovanju in uvajanju e-uprave (e-storitev), e-participacije in odprte uprave (odprtih podatkov)
- identificirati dimenzije digitalne ločnice in zasnovati ukrepe za njeno zmanjšanje

#### Kompetence

- zmožnost primerjalne analize in kritičnega vrednotenja stanja e-uprave na izbranem (geografskem ali organizacijskem) področju v Sloveniji in tujini
- zmožnost prepoznavanja priložnosti za uvedbo in uporabo storitev e-uprave in odprtih podatkov ter sodelovanja pri razvoju ustreznih ukrepov in rešitev
- zmožnost sodelovanja strateškega načrtovanja razvoja e-uprave, e-participacije in odprte uprave

### Objectives and competences:

Goals – student:

- reads and understands complex professional and scientific e-government literature in English language
- knows how to use content analysis methodology on the current corpus of scientific and professional articles in the field of e-government
- selects and applies methodologies for the evaluation of e-government
- identifies and applies appropriate approaches to strategic planning and implementation of e-government services (e-services), e-participation and open government (open data)
- identifies the dimensions of the digital divide and designs measures for its reduction

#### Competencies

- the ability of a comparative analysis and critical assessment of the state of e-government in the chosen (geographical or organizational) field in Slovenia and abroad
- the ability to identify opportunities for the introduction and use of e-government services and open data, together with the ability of participation in the development of appropriate measures and solutions
- the ability to participate in strategic planning of e-government development, e-participation and open government

### Predvideni študijski rezultati:

Študent

- pozna, razume in lahko uporablja različne pristope in fazne modele za uvajanje e-uprave, e-participacije in odprte uprave
- pozna, razume in lahko tvori ustrezno strukturo in vsebino strateških dokumentov s področja e-uprave
- pozna, razume in lahko uporablja metodologije za vrednotenje e-uprave

### Intended learning outcomes:

Student:

- knows, understands and can use a variety of approaches and models for the deployment of e-government, e-participation and open government
- knows, understands and is able to form a proper structure and content of the strategic documents in the field of e-government
- knows, understands and is able to apply the methodologies for e-government evaluation

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• zna analizirati in načrtovati ukrepe za odpravljanje digitalne ločnice in uvajanje interoperabilnosti med informacijskimi sistemi v upravi</li> <li>• zna analizirati načrte informacijskih rešitev za uvajanje in izkoriščanje e-storitev ter odprtih podatkov v upravi</li> </ul> | <ul style="list-style-type: none"> <li>• is able to analyze and plan actions to eliminate the digital divide and deployment of interoperability between information systems in administration</li> <li>• is able to analyze plans of IT solutions for the deployment and use of e-services and open data in public administration</li> </ul> |
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| <b>Metode poučevanja in učenja:</b>                                                                                                                                                                           | <b>Learning and teaching methods:</b>                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. priprava na predavanja</li> <li>2. predavanje</li> <li>3. priprava na seminar</li> <li>4. seminar</li> <li>5. konzultacije</li> <li>6. seminarska naloga</li> </ol> | <ol style="list-style-type: none"> <li>1. preparations for lectures</li> <li>2. lecture</li> <li>3. preparations for seminars</li> <li>4. seminars</li> <li>5. study consultation</li> <li>6. seminar paper</li> </ol> |

| <b>Načini ocenjevanja:</b>                                            | <b>Delež/Weight</b> | <b>Assessment:</b>                                               |
|-----------------------------------------------------------------------|---------------------|------------------------------------------------------------------|
| 1. pisni in/ali ustni izpit                                           | 55,00 %             | 1. written (and/or oral) exam                                    |
| 2. sprotne naloge in aktivno sodelovanje na predavanjih in seminarjih | 45,00 %             | 2. Assignments and active participation in lectures and seminars |

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

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• ZHANG, Rui, HRISTOVSKI, Dimitar, SCHUTTE, Dalton, KASTRIN, Andrej, FISZMAN, Marcelo, KILICOGU, Halil. Drug repurposing for COVID-19 via knowledge graph completion. Journal of biomedical informatics, ISSN 1532-0480. 2021, vol. 115, str. 1-15, ilustr. doi: 10.1016/j.jbi.2021.103696.</li> <li>• KASTRIN, Andrej, HRISTOVSKI, Dimitar. Scientometric analysis and knowledge mapping of literature-based discovery (1986-2020). Scientometrics, ISSN 0138-9130, 2021, vol. 126, str. 1415-1451. doi: 10.1007/s11192-020-03811-z.</li> <li>• KASTRIN, Andrej, HRISTOVSKI, Dimitar. Disentangling the evolution of MEDLINE bibliographic database : a complex network perspective. Journal of biomedical informatics, ISSN 1532-0464. 2019, vol. 89, str. 101-113, ilustr. doi: 10.1016/j.jbi.2018.11.014.</li> <li>• HRISTOVSKI, Dimitar, KASTRIN, Andrej, DINEVSKI, Dejan, BURGUN, Anita, ŽIBERNA, Lovro, RINDFLESCHE, Thomas C. Using literature-based discovery to explain adverse drug effects. Journal of medical systems, ISSN 1573-689X, Aug. 2016, vol. 40, iss. 8, 1-5 str. doi: 10.1007/s10916-016-0544-z.</li> <li>• KASTRIN, Andrej, RINDFLESCHE, Thomas C., HRISTOVSKI, Dimitar. Link prediction on a network of co-occurring MeSH terms : towards literature-based discovery. Methods of information in medicine, ISSN 0026-1270, AUG. 2016, vol. 55, iss. 4, str. 340-346, doi: 10.3414/ME15-01-0108.</li> <li>• HRISTOVSKI, Dimitar, DINEVSKI, Dejan, KASTRIN, Andrej, RINDFLESCHE, Thomas C. Biomedical question answering using semantic relations. BMC bioinformatics, ISSN 1471-2105, 2015, vol. 16, no. 6, 14 str., doi: 10.1186/s12859-014-0365-3.</li> <li>• Jukić, T., Vintar M., Benčina, J. (2013). Ex-ante evaluation : towards an assessment model of its impact on the success of e-government projects. Information polity, let. 18, št. 4, str. 343-361.</li> <li>• Kunstelj, M., Jukić, T., Vintar, M. (2009). How to fully exploit the results of e-government user surveys : the case of Slovenia. International Review of Administrative Sciences, let. 75, št. 1, str. 117-149.</li> </ul> |
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