UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Internetne aplikacije in upravljanje
Course title:	Internet Applications and Government

Študijski program in stopnja Study programme and level	Modul Module	Letnik Academic year	Semester Semester
Informacijske in komunikacijske tehnologije, 3. stopnja	Napredne internetne tehnologije	1	1
Information and Communication Technologies, 3rd cycle	Advanced Internet Technologies	1	1

Vrsta predmeta / Course type | Izbirni / Elective

Univerzitetna koda predmeta / University course code: | IKT3-664

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Druge oblike	Samost. delo Individ. work	ECTS
15	15			15	105	5

*Navedena porazdelitev ur velja, če je vpisanih vsaj 15 študentov. Drugače se obseg izvedbe kontaktnih ur sorazmerno zmanjša in prenese v samostojno delo. / This distribution of hours is valid if at least 15 students are enrolled. Otherwise the contact hours are linearly reduced and transfered to individual work.

Nosilec predmeta / Lecturer: | Prof. dr. Borka Jerman Blažič

Jeziki /	**Predavanja / Lectures:**	Slovenščina, angleščina / Slovenian, English
Languages:	**Vaje / Tutorial:**	

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

Prerequisites:

Zaključen študij druge stopnje s področja informacijskih ali komunikacijskih tehnologij ali zaključen študij druge stopnje na drugih področjih z znanjem osnov s področja predmeta. Potrebna so tudi osnovna znanja matematike, računalništva in informatike.	Completed second cycle studies in information or communication technologies or completed second cycle studies in other fields with knowledge of fundamentals in the field of this course. Basic knowledge of mathematics, computer science and informatics is also requested.

Vsebina:

Content (Syllabus outline):

Internetne storitve in aplikacije
    Imenski prostor Interneta
    Upravljanje z domenami
    Trg imenskega prostora
    Preslikava naslovov, URI, URL
    ENUM
    Varnost pri v upravljanju z domenami
    DNSSEC
Splet in družabna omrežja
    Protokol HTTP in jezik HTML
    Spletne aplikacije
	Applications and services
	    Domain Name System
	    Managing internet domain space
	    Internet Address Mapping, URI, URL
	    ENUM
	    Security provision in DNS operation -DNSSEC
	    World Wide Web
	    Protocol HTTP and language HTML
	    WEB applications, Social networks
	Other Internet services
	    E-mail

Druge standardne storitve	File Transfer
Elektronska pošta	VoIP, P2P, Multimedia and IP telephony
Prenos datotek	E-government services (justice, administration, health)
VoIP, P2P prenos vsebin IP TV	Management and internet governance
Storitve e-uprave, e-pravo, e-zdravje	Protocol SNMP
Upravljanje interneta	Internet governance
Protokol SNMP	ICANN and IANA Operation
Delovanje in naloge ICANN in IANA	

Temeljna literatura in viri / Readings:

Izbrana poglavja iz naslednjih knjig: / Selected chapters from the following books:

- B. A. Forouzan, *Data Communications and Networking*, McGraw Hill, 5th edition, 2012, N.Y. ISBN 978-0-07-296775-3
- A. S.Tanenbaum, *Computer Networks*, 5th, edition, Prentice Hall, 2010, N.J. ISBN 978-0-132-12695-3
- P. Loshin, IPv6 Clearly explained, Academic Press, S.F, 1999 ISBN: 978-1-558-60810-8
- J.P.Martin-Flatin, Web-based management of IP Networks and systems, Willey , 2003, ISBN 0-471-48702-3, Chichester, UK
- C.Liu, J.Peek, R.Jones, B.Buus, A.Nye, Managing Internet Information Services, A nutshel handbook, O`Reilly & Ass.2004, ISBN 1-56592-062-7, Sebastopol, CA, USA

Cilji in kompetence:

Objectives and competences:

Cilji:	Objectives:
Pridobiti temeljna znanja s področja Internetnih storitev, osnove delovanja aplikacijskih protokolov in storitev. Razumevanje upravljanja interneta v pogojih digitalnega trga. Vloga in pomen družabnih omrežij	Understanding application layer of the TCP/IP protocol stack. Knowledge and understanding of the principles of network application architecture, application protocols and services. Understanding internet governance and operation of the domain systems
Kompetence:	Competences:
Obvladati področje internetnih storitev – uporaba in dizajn aplikacij, upravljanje internetnih omrežij in storitev	Mastering the field of internet applications, design of services, managing internet networks

Predvideni študijski rezultati:

Intended learning outcomes:

Znanje, razumevanje in upravljanje ter načrtovanje internetnih aplikacij.	Knowledge, understanding and capability to design internet services addressing different needs and applications.
Pridobitev znanja in obvladovanje delovanja arhitekture internetnih aplikacij. Uporaba aplikacijskih protokolov (HTTP, DNS, SMTP, MIME, FTP, P2P), med-komunikacijskih procesov in internetnih storitev za potrebe načrtovanja internetnih storitev in njihovo upravljanje ter vzdrževanje. Uporaba in načrtovanje družabnih omrežij.	Practical use in designing services based on protocols: DNS, HTTP, SMTP, MIME, P2P, SNMP and other.. Understanding of Client-Server Application Model, P2P communications, Communication of processes. Application of the acquired knowledge in design of internet services and their governance. Use and design of social networks.
Načrtovanje spletnih aplikacij	Design web applications

Metode poučevanja in učenja:	**Learning and teaching methods:**
Predavanja, seminarji, konzultacije, laboratorijsko delo	Lectures, seminar work, consultations, laboratory work

Načini ocenjevanja:	Delež (v %) / Weight (in %)	**Assessment:**
Seminarska naloga	50 %	Seminar work
Ustni zagovor seminarske naloge	50 %	Oral defense of seminar work

Reference nosilca / Lecturer's references:

- **B.** Jerman-Blažič. Designing a large cross - border secured eID service for e-government and e-business. In: 2014 International Conference on Multimedia Computing and Systems, April 14-16, 2014, Marrakech, Moroco.
- C. Callanan, B. Jerman-Blažič, A. Jerman Blažič. User tolerance of privacy abuse on mobile Internet and the country level of development. Information development, ISSN 0266-6669, [in press], 10 p., 2015.
- C. Callanan, B. Jerman-Blažič. User understanding of privacy in emerging mobile markets. IEEE technology & society magazine, ISSN 0278-0097, vol. 33, no. 4, pp. 48-56, 2014.
- R. Bojanc, B. Jerman-Blažič. A quantitative model for information-security risk management. Engineering management journal, vol. 25, no. 3, pp. 25-37, 2013.
- R. Bojanc, B. Jerman-Blažič, M. Tekavčič, Informacijska varnost v podjetniškem okolju: potrebe, ukrepi *in ekonomika vlaganj*, Ekonomska fakulteta, VI, 168 p. 2014.