

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Upravljanje informacijskih in komunikacijskih sistemov
Course title:	Management of Information and Communication Systems

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Informatika v sodobni družbi, magistrski študijski program druge stopnje	-	Prvi ali drugi	Drugi ali četrsti
Informatics in Contemporary Society, second cycle Masters Study Programme	-	First or second	Second or fourth

Vrsta predmeta / Course type	Izbirni / Elective
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Univerzitetna koda predmeta / University course code:	1-ISD-MAG-IP-UIKS-2019-05-13
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Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
30	-	30	-	-	90	5

Nosilec predmeta /Lecturer:	
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Jeziki / Languages:	Predavanja / Lectures:	slovenski, angleški / Slovene, English
	Vaje / Tutorial:	slovenski, angleški / Slovene, English

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

Študent/študentka mora pred pristopom k izpitu pripraviti in zagovarjati seminarsko nalogo.

Prerequisites:

Prior to the exam, the student has to prepare and present seminar work.

Vsebina:

- poslovne strategije in njihov vpliv na razvoj informacijske infrastrukture
- metodologije strateškega planiranja informatike, EMRIS (Enotna metodologija razvoja informacijskih sistemov);
- poslovno-informacijske arhitekture: arhitekturne ravni – poslovna, aplikativna, tehnološka, usklajenost poslovne in informacijske domene, storitveno usmerjena arhitektura

Content (Syllabus outline):

- business strategies and their influence on IT infrastructure development
- strategic ICT planning methodologies, EMRIS (Unified information systems development methodology)
- business-IT architecture: architectural levels: business, application, technology, harmonization of business and IT domains, service-

(SOA), konceptualni model arhitekture;

- arhitekturne metode in ogrodja: Zachman, TOGAF, Archimate;
- instrumenti upravljanja in evalvacije informacijskih sistemov: EFQM, BSC, ISO/IEC 250x , ISO 2700x, DeLone and McLean Information Systems Success Model, CMMI
- ogrodja in najboljše prakse upravljanja informatike: COBIT, ITIL, upravljanje varnosti, zagotavljanje neprekinjenosti poslovanja

oriented architecture (SOA), a conceptual model of architecture;

- architectural methods and frameworks: Zachman, TOGAF, ArchiMate;
- instruments of management and evaluation of information systems: EFQM, BSC, ISO / IEC 250X, ISO 27000, Delone and McLean Information Systems Success Model, CMMI
- frameworks and best practices for IT management: COBIT, ITIL, security management, business continuity management

Temeljni literatura in viri / Readings:

Literatura in viri se zaradi nenehnega razvoja posodablja v vsakem študijskem letu. / Readings will be updated annually.

- Goldratt E. M., Cox F. *The Goal: A Process of Ongoing Improvement*, Gower Publishing Ltd; Fourth edition, 2014.
- Cox F. J., Schleier J. *Theory of Constraints Handbook*, McGraw-Hill Professional, 2010.

Cilji in kompetence:

Cilji učne enote so:

- seznanitev s strateškim pristopom k upravljanju informacijskih in komunikacijskih sistemov v organizaciji
- razumevanje vloge tehnološke strategije v odnosu do poslovne in organizacijske strategije
- pridobitev teoretičnih in praktičnih znanj za upravljanje informacijskih in komunikacijskih sistemov v organizaciji
- seznanitev z metodologijami za analizo stanja na področju informatizacije organizacije in izdelavo predlogov za izboljšanje stanja
- seznanitev s pristopi k uvajanju celovitih informacijskih in komunikacijskih rešitev v organizacijo
- seznanitev s političnimi, človeškimi in organizacijskimi dejavniki, interesi in konflikti, ki se pojavljajo

Objectives and competences:

Objectives of the instructional unit:

- students will acquaint themselves with the strategic approach to the governance of information and communication systems within the organization
- students will understand the role of technology strategy in relation to business and organizational strategy
- students will gain theoretical and practical knowledge of management of information and communication systems within the organization
- students will acquaint themselves with the methodologies for the analysis of the situation in the computerization of the organization and making suggestions for improvement
- students will acquaint themselves with the approaches to the introduction of integrated IT and

ob prenovi poslovnih procesov in informatizaciji organizacije

Učna enota prispeva k razvoju naslednjih splošnih in predmetno specifičnih kompetenc:

- sposobnost vodenja in vzdrževanja informacijskega sistema in posameznih aplikacij informacijsko komunikacijske tehnologije
- poglobljeno razumevanje in kritično razmišljanje o zmožnostih in omejitvah informacijsko komunikacijskih tehnologij
- sposobnost za reševanje konkretnih družbenih in delovnih problemov z uporabo družboslovnih znanstvenih metod in postopkov

communications solutions to the organization

- students will acquaint themselves with the political, human and organizational factors, interests and conflicts that arise when renewal of business processes and computerization of organizations

The instructional unit contributes to the development of the following general and subject-specific competences:

- the ability to manage and maintain an information system and individual applications of information communication technology
- in-depth understanding and critical thinking regarding the possibilities and limitations of information and communication technologies
- the ability to solve actual social and work problems with the use of social scientific methods and procedures

Predvideni študijski rezultati:

Znanje in razumevanje:

Sposobnost študenta/študentke bo:

- razumeti in sodelovati v procesu upravljanja informacijskih in komunikacijskih tehnologij v organizaciji
- spoznati osnove veščine Teorije omejitev (ang. Theory of Constraints), s poudarkom na miselnem procesu (ang. Thinking Process).
- sodelovati pri uvajanju celovitih IKT rešitev, identificirati glavne probleme ter predlagati rešitve za njihovo odpravo – omogočiti vodstvu podjetja, da se fokusira na glavne težave, ne na simptome

Intended learning outcomes:

Knowledge and understanding:

The ability of the students will be:

- to understand and participate in the process of managing information and communication technologies in the organization
- to learn the basics skills of Theory of Constraints, with emphasis on the Thinking Process
- to participate in the implementation of integrated ICT solutions, to identify the main problems and suggest solutions to overcome them - to offer management of the organisation to focus on the main problem, not the symptoms
- to understand political, interpersonal and other types of

<ul style="list-style-type: none"> • razumeti politične, medosebne in druge vrste konfliktov, ki nastopijo ob prenovi poslovnih procesov in informatizaciji • povezovati različne interese v organizaciji pri pripravljanju strateških in izvedbenih načrtov ter v projektih na področju upravljanja informacijskih in komunikacijskih tehnologij • razumeti povezavo med prenovo procesov, njihovo informatizacijo in drugimi pobudami za informatizacijo organizacije 	<p>conflicts which arise in renewal of the business processes</p> <ul style="list-style-type: none"> • to integrate various interests of the organization in preparing strategic and operational plans and projects in the field of management information and communication technologies • to understand the link between renewal processes and their informatization
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Metode poučevanja in učenja:

<ul style="list-style-type: none"> • <i>predavanja</i> z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov) • <i>laboratorijske vaje</i> • <i>individualne in skupinske konzultacije</i> (diskusija, dodatna razlaga, obravnava specifičnih vprašanj)
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Learning and teaching methods:

<ul style="list-style-type: none"> • lectures with active participation of students (explanation, discussion, questions, examples, problem solving) • laboratory exercises • individual and group consultations (discussion, additional explanation, specific issues)
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Načini ocenjevanja:

Delež (v %) /
Weight (in %)

Assessment:

<p>Način (pisni izpit, ustno izpraševanje, naloge, projekt):</p> <ul style="list-style-type: none"> • pisni/ustni izpit • laboratorijsko delo in seminarska naloga 	<p>60 40</p>	<p>Type (examination, oral, coursework, project):</p> <ul style="list-style-type: none"> • written/oral exam • laboratory work and seminar
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