UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION

Predmet:	RAČUNALNIŠTVO V LOGISTIKI
Subject Title:	COMPUTER SCEINCE IN LOGISTICS

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
LOGISTIKA SISTEMOV 1. stopnja		1.	1.
SYSTEM LOGISTICS 1. degree			

Univerzitetna koda predmeta / University subject code: UN

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Labor work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
10 e-P 12 a-P		5 e-V 18 a-V			75	4

Nosilec predmeta / Lecturer: ROMAN GUMZEJ

Jeziki / Languages:	Predavanja / Lecture:	SLOVENSKI / SLOVENE
	Vaje / Tutorial:	SLOVENSKI / SLOVENE

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	Prerequisits:
ni pogojev	none

Vsebina:

1. Zgradba in delovanje računalnika: strojna oprema, periferne naprave, računalniška omrežja, programska oprema, programski jeziki, operacijski sistemi, procesi in opravila.

2. Podatek – informacija – znanje: Shannonova teorija informacij, definicija bita, oblike podatkov (števila, črke, slike in zvok), avtomatizirana obdelava podatkov, shranjevanje podatkov – podatkovne datoteke, podatkovne baze, podatkovna skladišča.

3. "Poslovni proces : Informacijski sistem":
- organizacijski vidik podjetja,
- nivoji odločanja v podjetju,
- komponente logističnega informacijskega sistema,
- pretok podatkov v logistični oskrbovalni verigi.

4. Računalniško podprto vodenje projektov:
- življenjski cikel projekta,
- parametri projekta,
- dodeljevanje nalog in resursov,
- Ganttovi in PERT diagrami,
- metoda kritične poti (CPM).

Content (Syllabus outline):

1. Computing system architecture and function: computer hardware, peripheral devices, computer networks, software, programming languages, operating systems, processes and tasks.

2. Data-Information-Knowledge: Shannon's information theory, bit-definition, data format (numbers, characters, pictures and sound), automated data processing, data storage – data files, data bases, data warehouses.

3. "Business process : Information system":
- organizational view of a company,
- levels of decision making in a company,
- logistic information system components,
- data flow in a logistics supply chain.

4. Computer-aided project management:
- lifecycle of a project,
- project parameters,
- assignment of tasks and resources,
- Gantt and PERT diagrams,
- critical path method (CPM).

Temeljni literatura in viri / Textbooks:

Gumzej, R. (2013). Računalništvo in informatika v logistiki, Celje: Fakulteta za logistiko. ISBN 978-961-6562-86-7.

Gumzej, R. (2013). Računalništvo in informatika v logistiki, Celje: Fakulteta za logistiko. ISBN 978-961-6562-87-4.

Barker R. (1990), CASE Method. Tasks and Deliverables. Wokingham, England: Addison-Wesley.

Rainer, R. K. & Turban, E. (2008). Introduction to Information Systems: Supporting and Transforming Business. John Wiley and Sons, 2nd edition.

White, R. (2006). How Computers Work. QuE.

Project Management Institute (2003). A Guide To The Project Management Body Of Knowledge, 3rd ed., Project Management Institute. ISBN 1-930699-45-X.

Kerzner, H. (2003). Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 8th Ed., Wiley. ISBN 0-471-22577-0.

Keene, S. (1994). Comparing hardware and software reliability. Reliability Review, 14(4), 5–7, 21.

Maslow, A. (1943). A theory of human motivation. Psychological Review, 50(4), 370–96.

Shannon, C. & Weaver, W. (1963). A Mathematical Theory of Communication. University of Illinois Press, Champaign, IL, USA.

Šuhel, P., Mertik, M. & Tovšak, P. (2009). Informacijska tehnologija - projektno vodenje, Ljubljana, Ormož, Mislinja. ISBN 978-961-245-767-9

White, R. (2006). How Computers Work. QuE.

Cilji:	Objectives:
Študenti bodo: - spoznali osnove sodobnih informacijskih tehnologij: temeljne principe delovanja sodobnih računalnikov in računalniških omrežij, - spoznali temeljne koncepte računalniško podprtih logističnih informacijskih sistemov, - spoznali osnove računalniško podprtega načrtovanja in vodenja projektov.	Students will: - get to know the fundamentals of contemporary information technologies: fundamental paradigms of contemporary computer (networks) operation, - get to know the key concepts of computer aided logistic information systems, - gain basic knowledge in the field of computer-aided project planning.

Predvideni študijski rezultati:	Intended learning outcome:
Znanje in razumevanje: - študenti razumejo osnovne koncepte in zgradbo računalniško podprtih informacijskih sistemov - zlasti logističnih.	Knowledge and Understanding: - the students develop a grasp on the key concepts and structure of computerised information systems – especially logistic.
Prenesljive/ključne spretnosti in drugi atributi: - študenti so sposobni sodelovanja pri uvajanju računalniško podprtih logističnih informacijskih sistemov ter sodelovanja v projektih s podporo informacijske tehnologije.	Transferable/Key Skills and other attributes: - the students are able to cooperate in the introduction of computerised logistic information systems as well as cooperation in ICT-supported projects.

Metode poučevanja in učenja:	Learning and teaching methods:
Predavanja: pri predavanjih študent spozna teoretično osnovo predmeta. Del predavanj se izvaja na klasični način v predavalnici, del pa v obliki e-predavanj (e-predavanja se lahko izvajajo na videokonferenčni način ali s pomočjo posebej v ta namen didaktično pripravljenih e-gradiv v virtualnem elektronskem učnem okolju).	Lectures: students understand the theoretical frameworks of the course. Part of the lecture course is in a classroom while the rest is in the form of e-learning (e-lectures may be given via video-conferencing or with the help of specially designed e-material in a virtual electronic learning environment)

Vaje: pri vajah študent utrdi teoretično znanje in spozna aplikativne možnosti. Del vaj se izvaja na klasični način v predavalnici, del pa v obliki e-predavanj (e-vaje se lahko izvajajo na videokonferenčni način ali s pomočjo posebej v ta namen didaktično pripravljenih e-gradiv v virtualnem elektronskem učnem okolju).

Tutorials: Students enhance their theoretical knowledge and are able to apply it. Part of the seminar is in a classroom while the rest is in the form of e-learning (e-seminars may be given via video-conferencing or with the help of specially designed e-material in a virtual electronic learning environment).

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
domače naloge,	25 %	seminar work,
seminarska naloga,	25 %	project,
pisni izpit.	50 %	written exam.

Reference nosilca / Lecturer's references

Gumzej, R. (2013). Računalništvo in informatika v logistiki, Celje: Fakulteta za logistiko. ISBN 978-961-6562-86-7.

Gumzej, R. (2013). Računalništvo in informatika v logistiki, Celje: Fakulteta za logistiko. ISBN 978-961-6562-87-4.

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