UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Predmet:	INFORMACIJSKA PODPORA LOGISTIČNIM SISTEMOM
Course title:	INFORMATION SUPPORT FOR LOGISTICS SYSTEMS

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
LOGISTIKA SISTEMOV 2.stopnja		1.	1.
SYSTEM LOGISTICS 2.degree		1.	1.

Vrsta predmeta / Course type: OBVEZNI

Univerzitetna koda predmeta / University course code: MAG

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Laboratory work	Druge oblike študija Field work	Samost. delo Individ. work	ECTS
24-e-P 21-a-P		19 e-V 21 a-V			125	7

Nosilec predmeta / Lecturer: ROMAN GUMZEJ

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

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

Ni pogojev.

Prerequisits:

None

Vsebina:

1. Logistični informacijski sistemi v logističnih sistemih
- v proizvodnji, storitvah in prodaji
- v podporo distribuciji in inverzni logistiki
- v javni upravi (E-uprava)

2. Računalniško podprto logistično planiranje
- konceptualno snovanje logističnih sistemov (strukturni in logični model)
- načrtovanje podatkovnih baz (podatkovni model)
- načrtovanje logističnih procesov (procesni model)

3. Računalniško podprto dimenzioniranje virov
- v proizvodnji, storitvah in trgovini
- v distribuciji (skladiščenju in transportu)

Content (Syllabus outline):

1. Logistic Information Systems (LIS) in logistics systems
- in production, services, and sales
- in distribution and inverse logistics
- in public services - E-government

2. Computer aided logistic planning
- conceptual modelling of logistics systems (structural and logical model)
- database modelling (data model)
- logistic process modelling (process model)

3. Computer aided resource planning
- in production, services, and sales
- in distribution (warehousing and transport)

Temeljni literatura in viri / Readings:

Gumzej, R. (2013). Informacijska podpora logističnim sistemom, Celje: Fakulteta za logistiko. ISBN 978-961-6562-90-4. ISBN 978-961-6562-91-1.

Dodatna literatura

Date, C.J. (1999). An Introduction to Database Systems (8th ed.). Addison-Wesley Longman. ISBN 0-321-19784-4
Cloud, D.J. & Rainey, L.B. (edts.) (1998). Applied Modeling and Simulation: An integrated approach to development and operation, McGraw-Hill. ISBN 0-07-228303-3
Chung, C.C. (2004). Simulation Modeling Handbook - A Practical Approach, CRC Press. ISBN 0-8493-1241-8
Grant D.B., Lambert D.M., Stock J.R. & Ellram L.M. (2006). Fundementals of Logistics Management, European Edition. McGraw-Hill, Berkshire, UK.
Flood R.L. (1987). Complexity: A definition by construction of a conceptual framework. Systems Research, 4(3), 177–185.
Kent W. (1983). A Simple Guide to Five Normal Forms in Relational Database Theory, Communications of the ACM, vol. 26, pp. 120-125.
Kričej D. (2002). e-uprava na dlani, poslovanje z državo po internetu danes in jutri, Pasadena.
Mohorič T. (1995). Uvod v podatkovne baze, Ljubljana : BI-TIM. ISBN 961-6046-02-0
Mohorič T. (1997). Načrtovanje relacijskih podatkovnih baz, Ljubljana : BI-TIM. ISBN 961-6046-05-5
e-Government - Harnessing ICT to improve public services (2008). Vir: ec.europa.eu/information_society/activities/egovernment/index_en.htm
Yoon J. (2007). Korea's e-Government Strategy, National Information Society Agency, Korea.
USA.gov (2003) Implementing the President's Management Agenda for E-Government - E-Government Strategy, USA. Vir: https://www.usa.gov/
digital.govt.nz (2019) Supporting government's digital transformation. Vir: https://www.digital.govt.nz/
JaamSim Development Team (2019). JaamSim: Discrete-Event Simulation Software. Version 2019-10. Vir: http://jaamsim.com.
Yaoqiang BPMN Editor (2019). Vir: https://sourceforge.net/projects/bpmn/.

Cilji in kompetence:

Študenti bodo:

- pridobili poglobljena znanja o informacijski podpori logističnim postopkom v proizvodnih, distribucijskih, trgovinskih sistemih in sistemih javne uprave,
- osvojili metode računalniško podprtega strateškega načrtovanja za demonstracijo sistemskega pristopa k načrtovanju logističnih sistemov,
- osvojili metode načrtovanja relacijskih podatkovnih baz.

Objectives and competences:

Students will:

- gain in depth knowledge on information support to logistics procedures in production, distribution, sales and e-government systems,
- master the methods of computer-aided strategic planning demonstrating a systems approach to planning logistics systems,
- master relational database design methods.

Predvideni študijski rezultati:

Znanje in razumevanje:

- razumevanje strukture in delovanja logističnih informacijskih sistemov,
- razumevanje konceptov in metod računalniško podprtega strateškega planiranja in dimenzioniranja virov logističnih sistemov.

Prenesljive/ključne spretnosti in drugi atributi:

- načrtovanje, implementacija in vzdrževanje relacijskih baz podatkov,
- sistemski pristop k načrtovanju in dimenzioniranju virov logističnih sistemov.

Intended learning outcomes:

Knowledge and Understanding:

- understanding of the structure and operation of logistic information systems,
- understanding of the concepts and methods of computer-aided strategic planning and capacity planning of logistics systems.

Transferable/Key Skills and other attributes:

- design, implementation and maintenance of relational databases,
- systems approach to design and capacity planning of logistics systems.

Metode poučevanja in učenja:	Learning and teaching methods:
Predavanja: pri predavanjih študent spozna teoretične vsebine 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. Vaje: pri vajah študent utrdi teoretično znanje in spozna aplikativne možnosti. Del vaj se izvaja na klasični način v predavalnici, del pa v obliki vaj (e-vaje 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 held in standard classroom while the rest is in the form of e-learning (e-lectures may be given via videoconferencing or with the help of specially designed e-material in a virtual electronic learning environment). Tutorials: Students enhance their theoretical knowledge and are able to apply it. Part of the tutorial is held in standard classroom while the rest is in the form of e-learning (e-tutorials 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:
Opravljene obveznosti e-predavanj in e-vaj so pogoj za pristop k izpitu		Successful completion of e-lectures and e-tutorials is a prerequisite for entering the exam
• Seminarska naloga	50%	• Seminar paper
• Ustni izpit	50 %	• Oral exam

Reference nosilca / Lecturer's references:

1. POLETAN JUGOVIĆ, Tanja, ČIŠIĆ, Dragan, GUMZEJ, Roman. Supply chain service quality improvement by e-marketplace automation. Promet. [Print ed.]. 2019, vol. 31, no. 2, str. 185-194, ilustr. ISSN 0353-5320. https://doi.org/10.7307/ptt.v31i2.3042, DOI: 10.7307/ptt.v31i2.3042.
2. MILIĆ, Bojan, ROSI, Bojan, GUMZEJ, Roman. An approach to e-marketplace automation. Tehnički vjesnik : znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku. May/Jun. 2019, god.=vol. 26, br.=no. 3, str. 639-649, ilustr. ISSN 1330-3651. https://doi.org/10.17559/TV-20171201150248, DOI: 10.17559/TV-20171201150248.
3. GUMZEJ, Roman, ČIŠIĆ, Dragan. Decentralized agent-based electronic marketplace supply chain ecosystem : Elektronski vir. Pomorstvo. 2018, vol. 32, no. 1, str. 21-27. ISSN 1846-8438. https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=296855.
4. GUMZEJ, Roman, ROSI, Bojan. Automated authentication and authorisation of consignors and their consignments within secure supply chains : Elektronski vir. Tehnički vjesnik. 2018, vol. 25, iss. 1, str. 203-209. ISSN 1848-6339. https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=285638.
5. GUMZEJ, Roman, ROSI, Bojan. An agent-based simulation of a QoS-oriented supply chain. Promet. [Print ed.]. 2017, vol. 29, no. 6, str. 593-601, ilustr. ISSN 0353-5320. [COBISS.SI-ID 512889917], [JCR, SNIP, WoS, Scopus]
6. RASHAD, Waleed, GUMZEJ, Roman. The information technology in supply chain integration : case study of Reda Chemicals with Elemica. International journal of supply chain management. [Spletna izd.]. Mar. 2014, vol. 3, no. 1, str. 62-69. ISSN 2050-7399. http://ojs.excelingtech.co.uk/index.php/IJSCM/article/view/876/pdf.

Opomba:

Navedene sestavine so obvezna sestavina učnega načrta predmeta kot ga določajo Merila za akreditacijo visokošolskih zavodov in študijskih programov v 7. členu (Ur. l. RS, št. 101/2004).