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 2

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:	Prerequisits:
Ni pogojev.	None

Vsebina:	Content (Syllabus outline):
Uvod	Introduction
Poslovni proces : Informacijski sistem (IS):	Business process : Information system (IS):
• nivoji odločanja v podjetju in informatika,	• levels of decision making in a company and informatics,
• komponente informacijskega sistema,	• information system components,
• informacijska infrastruktura,	• information infrastructure,
• ključne logistične aktivnosti in informacijska podpora le-tem.	• key logistic activities and their information support.
Logistična strategija in planiranje:	Logistics strategy and planning:
• tipi planov glede na časovni okvir, področje, podrobnost in nivo integracije,	• plan types considering their time frame, application area, detail and level of integration,
• strateško planiranje,	• strategic planning,
• načrtovanje in vodenje projektov.	• project planning and management.
Logistika v proizvodnji in trgovini	Logistics in production and trading
Nabava in planiranje inventarja (OMS):	

- spremljanje naročil skozi oskrbovalno verigo (SCM),
- logistična podatkovna baza (L-DB),
- IS za pomoč pri odločanju (DSS),
- IS za planiranje resursov in vodenje proizvodnje (ERP),
- IS za upravljanje odnosov s strankami (CRM),
- uvajanje principov JIT v poslovanje in upravljanje inventarja,
- ekonomična količina naročanja (EOQ) in varnostna zaloga.

Logistika v transportu (TMS)
Transport oseb : transport blaga:
- struktura transportnih poti,
- transportne verige,
- urbani transport blaga (blagovno distribucijski centri, tovorno transportni centri, transportna regulativa).
  IT podora načrtovanju transportov:
- uvod v sistemsko teorijo ter modeliranje in simulacija.

Logistika v skladiščenju blaga (WMS)
- tipi in struktura skladiščnih sistemov,
- operacije, ki spremljajo blago pri skladiščenju,
- avtomatizirano rokovanje z blagom.

Logistika v javni upravi - E-uprava
- infrastruktura in storitve (G2C, G2B, G2E, G2G),
- mehanizmi zagotavljanja varnosti in integritete podatkov,
- načrtovanje in vzdrževanje relacijskih baz podatkov.

Inverzna logistika in globalno logistično okolje
- ključne aktivnosti inverzne logistike
- potrebe in zahteve nadzorovanega in nenadzorovanega logističnega okolja,
- geografska porazdelitev poslovno-logističnih področij.
- prednosti enotnega gospodarsko-političnega okolja za logistiko in njen razvoj.
- SAP ERP – struktura in logistični moduli SAP ERP.

Ordering and inventory planning (OMS):
- order tracking through the supply chain (SCM),
- logistics data base (L-DB),
- IS for decision support (DSS),
- IS for resource planning and production control (ERP),
- IS for managing customer relations (CRM),
- introduction of JIT principles into the business process and inventory management,
- economical order quantity (EOQ) and safety stock.

Transport logistics (TMS)
Passenger : Freight transport:
- transport route structure,
- transport chain,
- urban transport of goods (city terminals, freight villages, transport regulation).
  IT support in transport planning:
- introduction to systems theory and modelling & simulation.

Warehouse logistics (WMS)
- types and structure of warehouse systems,
- warehouse management operations,
- automated goods handling.

Public service logistics - E-government
- infrastructure and services (G2C, G2B, G2E, G2G),
- mechanisms for ensuring security and integrity of data,
- planning and maintaining relational data bases.

Inverse logistics and global logistic environment
- key activities of inverse logistics
- needs and demands of controlled and uncontrolled logistics environment,
- geographic distribution of business-logistics areas.
- benefits of the unified political and commercial environment for logistics and its development.
- SAP ERP - structure and logistics modules SAP ERP.

Temeljni literatura in viri / Readings:

R. Gumzej, B. Jereb: Informacijska podpora logističnim sistemom (skripta), UM-FL, Celje-Krško, 2008.
http://164.8.132.54/IPLS/prvo.html
D.B.Grant, D.M.Lambert, J.R.Stock & L.M.Ellram: Fundementals of Logistics Management, European Edition. McGraw-Hill, Berkshire, UK, 2006.
Roman Gumzej, Informacijska podpora logističnim sistemom, e-gradivo, 2010

Cilji in kompetence:

Osvojitev

- preglednih znanj o logističnih postopkih v proizvodnih poslovnih sistemih in sistemih javne uprave,
- strateškega načrtovanja,
- sistemskega pristopa k načrtovanju logističnih sistemov,
- načrtovanja relacijskih podatkovnih baz.

Objectives and competences:

Students effort:

- encyclopaedic knowledge on logistics procedures in production and e-government systems,
- strategic planning,
- systems approach to planning logistics systems,
- relational database design.

Predvideni študijski rezultati:

Znanje in razumevanje:

- razumevanje zasnove in delovanja logističnih informacijskih sistemov,
- razumevanje konceptov strateškega planiranja in povezav ter postopkov in povezav med podsistemi logističnega informacijskega sistema.

Prenesljive/ključne spretnosti in drugi atributi:

- sistemski pristop k načrtovanju logističnih informacijskih sistemov.

Intended learning outcomes:

Knowledge and Understanding:

- understanding of the fundamentals and operation of logistic information systems,
- understanding of the concepts of strategic planning as well as procedures and interrelations between the subsystems of a logistic information system.

Transferable/Key Skills and other attributes:

- systems approach to design of logistics information systems.

Metode poučevanja in učenja:

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 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.

Learning and teaching methods:

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:
Seminarska naloga	50%	Individual project (seminar paper)
Ustni izpit	50 %	Oral 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.

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

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.

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

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

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.

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).