

**UČNI NAČRT PREDMETA / COURSE SYLLABUS**

<b>Ime predmeta:</b>	LOGISTIČNI SISTEMI IN OSKRBOVALNE VERIGE
<b>Course title:</b>	LOGISTICS SYSTEMS AND SUPPLY CHAINS

Študijski program in stopnja Study programme and cycle	Študijska smer Study option	Letnik Year of study	Semester Semester
LOGISTIKA SISTEMOV 3. stopnja		1.	1. in 2.
SYSTEM LOGISTICS 3 <sup>rd</sup> degree		1.	1. in 2.

<b>Vrsta predmeta (obvezni ali izbirni) / Course type (compulsory or elective)</b>	IZBIRNI
	ELECTIVE

<b>Univerzitetna koda predmeta / University course code:</b>	DR
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Predavanja Lectures	Seminar Seminar	Vaje Tutorial			Klinične vaje Clinical training	Druge oblike študija Other forms of study	Samost. delo Individual work	ECTS
20		AV	LV	RV			160	6

<b>Nosilec predmeta / Course coordinator:</b>	BOJAN ROSI
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<b>Jeziki /Languages:</b>	<b>Predavanja / Lectures:</b>	SLOVENSKI/SLOVENE
	<b>Vaje / Tutorial:</b>	SLOVENSKI/SLOVENE

<b>Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:</b>	<b>Prerequisites for enrolling in the course or for performing study obligations:</b>
Ni pogojev.	None.

<b>Vsebina (kratek pregled učnega načrta):</b>	<b>Content (syllabus outline):</b>
Znanstveno raziskovalno delo na področju oskrbovalnih verig, logističnih sistemov in logističnih verig. Filozofija upravljanja, vodenja in nadzora celovitih oskrbovalnih verig. Determiniranje nalog in izzivi učinkovitega upravljanja z oskrbovalnimi verigami. Preučevanje notranjih procesov in odnosov oskrbovalnih verig. Modeliranje notranjih procesov in optimiranje stanj celovitih oskrbovalnih verig. Predmet se navezuje na vsebine predmetov dodiplomskega in magistrskega študija.	Academic research in the field of supply chains, logistics systems and logistics chains. Philosophy of managing, operating and controlling integrated supply chains. Determining tasks and challenges of effective supply chain management. Studying internal processes and relationships of supply chains. Modelling internal processes and optimising integrated supply chain situations. The module refers to undergraduate and postgraduate masters courses.

<b>Temeljni literatura in viri / Reading materials:</b>
Handfield, R., B.: Introduction to supply chain management, Prentice.

Hall, London, 1999, ISBN: 0-13-621616-1, COBISS.SI-ID: 101335.

Zuckerman, A.: Supply chain management, Oxford (UK), Capstone, 2002, ISBN: 1-84112-244-0, COBISS.SI-ID: 528599

Ballou, R.: Business Logistics/Supply Chain Management. Academic Internet Publishers, Inc., UK (2006), ISBN-13: 978-1428807754.

Knolmayer, G.: Supply chain management based on SAP systems : order management in manufacturing companies : with 81 figures and 19 tables, Berlin, Heidelberg, New York, 2002, ISBN: 3-540-66952-3, COBISS.SI-ID: 22302469.

Günther, H. O., Mattfeld, D. C., Suhl, L. Supply Chain Management und Logistik: Optimierung, Simulation, Decision Support. Physica-Verlag Heidelberg. Germany (2005), ISBN-13: 978-3790815764.

Vollmann, T.E., Berry, W. L., Whybark, D.C., Jacobs, F. R., Vollmann, T., Berry, W. MANUFACTURING Planning And Control Systems For Supply Chain Management : The Definitive Guide for Professionals. McGraw-Hill, (2004), ISBN-13: 978-0071440332.

ROSI, Bojan. Innovation in systems thinking : the application of dialectical network thinking in resolving complex problems, (Business issues, competition and entrepreneurship). New York: Nova Publishers, cop. 2015. VIII, 98 str., ilustr. ISBN 978-1-63463-320.

KOVAČIČ, Andrej. Logistični sistemi in logistične verige. Študijsko gradivo Fakulteta za logistiko Univerze v Mariboru, Celje 2007.

ROSI, Bojan. IRD za potrebe doktorskega študija. Študijsko gradivo Fakulteta za logistiko Univerze v Mariboru, Celje 2016.

ORBANIČ, Josip, ROSI, Bojan, CVAHTE OJSTERŠEK, Tina (urednik), IPAVEC, Vesna Mia (urednik), GROBIN, Klemen (urednik), GROFELNIK, Igor (urednik). *Razvoj transporta, logistike in mobilnosti v Sloveniji*. 1. izd. Celje: Fakulteta za logistiko, 2016. 320 str., ilustr. ISBN 978-961-6562-79-9.

Znanstveno publiciranje, vir: <https://www.ukm.um.si/znanstveno-publiciranje>, najdeno 15. 11. 2016.

#### **Cilji in kompetence:**

Študenti:

- se usposobijo za znanstveno raziskovalno delo iz področja raziskovanja oskrbovalnih verig,
- se usposobijo za predstavitev svojega raziskovalnega dela (članki, referati) in predstavitev praktičnih prednosti rezultatov svojega raziskovalnega dela,
- spoznajo raziskovalno področje logistični sistemi in logistične verige in ga prepoznajo kot morebitno polje bodočega znanstvenega dela,
- se naučijo rezultate svojega znanstvenega dela na področju oskrbovalnih verig uporabiti v praksi.

#### **Objectives and competences:**

Students will:

- be able to undertake an academic research from the field of supply chains,
- be able to present their research work (articles, papers) and hold presentations on practical advantages of their research results,
- be familiarised with the research area of logistics systems and logistics chains and gain the ability to recognise this area as a potential future academic research activity,
- learn to use the results of their academic research in the field of supply chains in real life situations.

#### **Predvideni študijski rezultati:**

Znanje in razumevanje:

- Študenti se naučijo in razumejo filozofijo upravljanja, vodenja in nadzora celovitih oskrbovalnih verig.
- Se naučijo pristopa k znanstvenemu proučevanju notranjih procesov in odnosov oskrbovalnih verig.
- Razumejo in znajo razvijati modele notranjih procesov in optimiranja stanj celovitih oskrbovalnih verig.

#### **Intended learning outcomes:**

Knowledge and Understanding:

- Students will learn and understand the philosophy of managing, operating and controlling integrated supply chains.
- Students will know how to approach the scientific study of internal processes and relations of supply chains.
- Students will understand and learn to develop models of internal processes and optimising integrated supply chains.

Prenesljive/ključne spretnosti in drugi atributi: <ul style="list-style-type: none"> <li>• Študenti se naučijo pristopa razvijanja različnih modelov realnosti.</li> <li>• Študenti se naučijo determiniranje nalog upravljanja različnih sistemov.</li> </ul>	Transferable/Key Skills and other attributes: <ul style="list-style-type: none"> <li>• Students will know how to approach the development of various reality models.</li> <li>• Students will learn to determine tasks of managing various systems.</li> </ul>
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<b>Metode poučevanja in učenja:</b> Individualno raziskovalno delo, razgovor, študij gradiva.	<b>Learning and teaching methods:</b> Individual research work, dialogues, study of materials.
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Načini ocenjevanja:	Delež (v %) / Share (in %)	Assessment methods:
Raziskovalna naloga in ustni izpit.	50%	Research coursework and examination.
	50%	

#### Reference nosilca / Course coordinator's references:

1. ROSI, Bojan, MULEJ, Matjaž. The dialectical network thinking - a new systems theory concerned with management. *Kybernetes : the international journal of systems & cybernetics*, ISSN 0368-492X, 2006, vol. 35, no. 7/8, str. 1165-1178. [COBISS.SI-ID 8859932].
2. ROSI, Bojan. *Innovation in systems thinking : the application of dialectical network thinking in resolving complex problems*, (Business issues, competition and entrepreneurship). New York: Nova Publishers, cop. 2015. VIII, 98 str., ilustr. ISBN 978-1-63463-320.
3. MULEJ, Matjaž, KAJZER, Štefan, POTOČAN, Vojko, ROSI, Bojan, KNEZ-RIEDL, Jožica. Interdependence of systems theories - potential innovation supporting innovation. *Kybernetes : the international journal of systems & cybernetics*, ISSN 0368-492X, 2006, vol. 35, no. 7/8, str. 942-954. [COBISS.SI-ID 8857628].
4. JEREB, Borut, IVANUŠA, Teodora, ROSI, Bojan. Systemic thinking and requisite holism in mastering logistics risks : the model for identifying risks in organisations and supply chain. *Amfiteatru economic*, ISSN 1582-9146, Feb. 2013, vol. 15, no. 33, str. 56-73, tabele. <http://www.amfiteatruconomic.ro/ArticolEN.aspx?CodArticol=1175>. [COBISS.SI-ID 512476221],
5. ROSI, Bojan, KRAMBERGER, Tomaž. Ali ste pripravljene dialektično omrežno razmišljati? 2008, Maribor, RoBo. str., ilustr., tabele. ISBN 978-961-92334-0-5.
6. STERNAD, Marjan, JAGRIČ, Timotej, ROSI, Bojan. Railway usage charges based on marginal maintenance costs. *Proceedings of the Institution of Civil Engineers - Transport*, ISSN 1751-7710. [Online ed.] <http://dx.doi.org/10.1680/jtran.15.00058>, doi: [10.1680/jtran.15.00058](https://doi.org/10.1680/jtran.15.00058). [COBISS.SI-ID 512834877], [JCR, SNIP].
7. STERNAD, Marjan, JAGRIČ, Timotej, ROSI, Bojan. Estimating marginal infrastructure cost in new infrastructure charging model. *Tehnički vjesnik : znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku*, ISSN 1330-3651, 2017, god. 24, br. 3, str. 829-836, ilustr. [http://hrcak.srce.hr/index.php?show=clanak&id=clanak\\_jezik=269882](http://hrcak.srce.hr/index.php?show=clanak&id=clanak_jezik=269882), doi: [10.17559/TV-20160218095139](https://doi.org/10.17559/TV-20160218095139). [COBISS.SI-ID 512850749].
8. GAJŠEK, Brigita, ROSI, Bojan. Stakeholder differences in the understanding of inter-organizational concept content as a risk factor : the case for a logistics platform. *The International journal of logistics management*, ISSN 0957-4093, 2015, vol. 26, iss. 1, str. 107-127, tabele. <http://www.emeraldinsight.com/doi/pdfplus/10.1108/IJLM-06-2012-0040>, doi: [10.1108/IJLM-06-2012-0040](https://doi.org/10.1108/IJLM-06-2012-0040). [COBISS.SI-ID 512661565].
9. MULEJ, Matjaž, REBERNIK, Miroslav, KNEZ-RIEDL, Jožica, ŽENKO, Zdenka, URŠIČ, Duško, POTOČAN, Vojko, ROSI, Bojan, KROŠLIN, Tadej. From knowledge to innovation society. V: GU, Jifa (ur.), CHROUST, Gerhard (ur.). *The new roles of systems sciences for a knowledge-based society : proceedings of the First World Congress of the International Federation for Systems Research*, Nov. 14-17, 2005, Kobe, Japan. [Compact disc ed.]. [S.l.]: International Federation for Systems Research. 2005, [8] str. [COBISS.SI-ID 8377116].

10. STERNAD, Marjan, ROSI, Bojan, JEREB, Borut. Risk identification in international business. *Strategic management : International journal of strategic management and decision support systems in strategic management*, ISSN 1821-3448, 2015, vol. 20, no. 1, str. 11-16, ilustr. [COBISS.SI-ID 512678461].
11. JEREB, Borut, CVAHTE OJSTERŠEK, Tina, ROSI, Bojan. Mastering supply chain risks. *Serbian Journal of Management*, ISSN 1452-4864, 2012, vol. 7, no. 2, str. [271]-285, ilustr., tabela. [http://aseestant.ceon.rs/index.php/sjm/article/view/1360/pdf\\_3](http://aseestant.ceon.rs/index.php/sjm/article/view/1360/pdf_3), [http://www.sjm06.com/SJM%20ISSN1452-4864/7\\_2\\_2012\\_171\\_325/7\\_2\\_271\\_285.pdf](http://www.sjm06.com/SJM%20ISSN1452-4864/7_2_2012_171_325/7_2_271_285.pdf), doi: 10.5937/sjm7-1360. [COBISS.SI-ID 512470333].
12. ANDROJNA Andrej, ROSI, Bojan. *Celostno obvladovanje vzdrževanja*. Tržič: Učila International, 2008. [COBISS.SI-ID 512073533].