

**UČNI NAČRT PREDMETA/COURSE SYLLABUS**

|               |                                   |
|---------------|-----------------------------------|
| Predmet:      | STOHAŠTIČNI PROCESI V LOGISTIKI   |
| Course title: | STOCHASTIC PROCESSES IN LOGISTICS |

| Študijski program in stopnja<br>Study programme and level | Študijska smer<br>Study field | Letnik<br>Academic year | Semester<br>Semester |
|---|-------------------------------|-------------------------|----------------------|
| LOGISTIKA SISTEMOV 2.stopnja                              |                               | 2.                      | 3.                   |
| SYSTEM LOGISTICS 2 <sup>nd</sup> degree                   |                               | 2.                      | 3.                   |

Vrsta predmeta / Course type: IZBIRNI

Univerzitetna koda predmeta / University course code: MAG

| Predavanja<br>Lectures | Seminar<br>Seminar | Vaje<br>Tutorial | Klinične vaje<br>Laboratory<br>work | Druge oblike<br>študija<br>Field work | Samost. delo<br>Individ. work | ECTS |
|------------------------|--------------------|------------------|-------------------------------------|---------------------------------------|-------------------------------|------|
| 24 e-P<br>21 a-P       |                    | 6 e-V<br>34 a-V  |                                     |                                       | 65                            | 5    |

Nosilec predmeta / Lecturer: ĐANI JURIČIĆ, DEJAN DRAGAN

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

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

Prerequisites:  
None.

**Vsebina:**

Teorija verjetnosti: Diskretne naključne spremenljivke in porazdelitve, Zvezne naključne spremenljivke in porazdelitve, Številске statistične karakteristike, Multivariantne porazdelitve, Pogojne in mejne porazdelitve, Funkcija največjega verjetja.

Stohastični procesi: Markovski procesi in markovske verige, Poissonovi procesi, Rojstno-smrtni procesi. Aplikacije v logističnih sistemih.

Uvod v analitično teorijo množične strežbe: Enokanalni strežni sistemi, Večkanalni strežni sistemi, Razlaga reševanja praktičnih in hipotetičnih primerov na podlagi realiziranih diplom.

Optimalno upravljanje zalog pri stohastičnem povpraševanju: Newsboy enoperiodični model, Zvezni (Q,s) model za zvezno pregledovanje stanja zalog, Periodični model za periodično pregledovanje stanja zalog. Razlaga reševanja praktičnih primerov na podlagi realiziranih diplom.

Teorija regresije in napovedovanja v operacijskih raziskavah in ekonometriji:  
 Poglobitev znanj iz področja regresijskih modelov in

**Content (Syllabus outline):**

Probability Theory : Discrete random variables and distributions , Continuous random variables and distributions, Statistical characteristics, Multivariate distributions, Conditional and marginal distributions, The maximum likelihood function.

Stochastic processes : Markov processes and Markov chains , Poisson processes , Birth-death processes . Applications in logistics systems.

Introduction to the analytic queuing theory: Single channel queuing systems , Multi channel queuing systems, Explanation of solving practical and hypothetical cases on the basis of worked diplomas .

Optimal inventory management for the case of stochastic demand: Newsboy one-period model, Continuous review model (Q, s), Periodic review model for periodically reviewing the status of inventory. Interpretation of practical applications on the basis of worked diplomas.

The theory of regression and forecasting in operations research and econometrics:  
 Advanced knowledge in the field of regression models

njihove uporabe v statistiki, pri napovedovanju, v operacijskih raziskavah in v ekonometriji.

Modeliranje in napovedovanje časovnih vrst v logistiki in ekonometriji:

Poglobitev znanj iz področja modeliranja in napovedovanja časovnih vrst, kot npr. uporaba dinamičnih modelov s porazdeljenimi zakasnitvami in Box-Jenkins modelov. Primeri iz operacijskih raziskav, oskrbnih verig in ekonometrije.

Statistične analize v pomorski in pristaniški logistiki ter prometu.

Reševanje problemov sledenja in navigacije s filtri.

Programska orodja: Scilab, Matlab in kloni.

and their application in statistics and forecasting, operations research and econometrics.

Modeling and forecasting of time series in logistics and econometrics:

Advanced knowledge in the field of modeling and forecasting of time series, as for example the use of Distributed lag models and Box-Jenkins models. Examples from the Operations Research, Supply chains and Econometrics.

Statistical analysis in the maritime and port logistics, in the transport, and in the traffic.

Solving of the tracking and navigation problems by the means of filters.

Software tools : Scilab, Matlab and clones .

#### Temeljna literatura in viri / Readings:

E-gradivo predmeta.

DRAGAN, Dejan: Stohastični procesi v logistiki : visokošolski učbenik, E-gradivo predmeta. Celje: Fakulteta za logistiko, 2017, 570 str.

DRAGAN, Dejan, VIZINGER, Tea. Stohastični procesi v logistiki: prosojnice. Celje: Fakulteta za logistiko, 2012, 1109 str. Ostala gradiva (slo):

DRAGAN, Dejan. Logistična regresija s programskim orodjem Matlab : skripta. Celje: Fakulteta za logistiko, 2014.

DRAGAN, Dejan: Stohastični procesi v logistiki : visokošolski učbenik. Celje: Fakulteta za logistiko, 2013.

DRAGAN, Dejan: Upravljanje logističnih sistemov : visokošolski učbenik. Celje: Fakulteta za logistiko, 2009.

DRAGAN, Dejan: Statistika, analiza podatkov in statistični modeli, neobjavljen učbenik v pripravi, 2014.

DRAGAN, Dejan: Predstavitev optimalnih strategij za upravljanje zaloga pri stohastičnem povpraševanju : interno dodatno gradivo, 2009.

Alenka Hudoklin, Roman Sabolek, Alenka Brezavšček: Stohastični procesi: Zbirka rešenih nalog, Moderna, Fakulteta za organizacijske vede UM, 2000.

Alenka Hudoklin Božič: Stohastični procesi, Moderna, Fakulteta za organizacijske vede UM, 2003.

Ostala gradiva (ang):

Brown, R. G., Introduction to Random Signals and Applied Kalman Filtering with Matlab Exercises and Solutions, Wiley, 3rd Edition, 1996.

Kutner, M.: Applied Linear Regression Models, McGraw-Hill, 4<sup>th</sup> ed., 2004.

Bartlett, M. S. (1978). An Introduction to Stochastic Processes: With Special Reference to Methods and Applications.

Bhat, B. R. (2004). Stochastic Models: Analysis and Applications: New Age International.

Box G., Jenkins, G.M.: Time Series Analysis: Forecasting and Control, Wiley, 4<sup>th</sup> ed., 2008.

Bowerman B.L.: Forecasting, Time Series, and Regression, Cengage Learning, 4th edition, 2004.

Cox, D. R. (2017). The Theory of Stochastic Processes: Routledge.

Goodman, Roe. (1988). Introduction to Stochastic Models: Courier Corporation.

Gross, Donald, Shortle, John F., Thompson, James M., & Harris, Carl M. (2011). Fundamentals of Queueing Theory: John Wiley & Sons.

Heyman, Daniel P., & Sobel, Matthew J. (1982). Stochastic Models in Operations Research: Stochastic Processes and Operating Characteristics: Courier Corporation.

Hsu H.: Schaum's Outline of Probability, Random Variables, and Random Processes, McGraw-Hill, 1997.

Kleinrock, Leonard. (1976). Queueing Systems: Theory: Wiley.

Lawler, Gregory F. (2006). Introduction to Stochastic Processes, Second Edition: CRC Press.

Muckstadt, John A., & Saprana, Amar. (2010). Principles of Inventory Management: When You Are Down to Four, Order More: Springer Science & Business Media.

Papoulis A.: Probability, Random Variables and Stochastic Processes with Errata Sheet, McGraw-Hill Science/Engineering/Math, 4th edition, 2001.

Ross S.M.: Introduction to Probability Models, Academic Press, 1997.  
Nelson, R.: Probability, stochastic processes, and queueing Theory, Springer, 1995.  
Winston W.L.: Operations Research: Applications and Algorithms, Cengage Learning, 4<sup>th</sup> ed., 2003.  
Waters D., inventory Control and Management, Wiley, 2nd ed., 2003.

#### Cilji in kompetence:

##### Cilj tega predmeta je:

- nadgraditi pojme teorije stohastičnih procesov,
- naučiti se ocenjevati statistične pokazatelje stohastičnih procesov,
- pridobiti sposobnost interpretacije nedoločenih pojavov,
- usposobiti se za uporabo teoretičnega znanja pri obravnavi zahtevnejših stohastičnih procesov v logistiki.

#### Objectives and competences:

##### This course will help students:

- to upgrade the issues in the theory of stochastic processes,
- to gain a deeper understanding of estimation of statistical indicators in stochastic processes,
- to gain the ability to interpret uncertain events,
- to gain the ability to apply theoretical knowledge for the purpose of solving of more complicated stochastic problems in logistics.

#### Predvideni študijski rezultati:

##### Znanje in razumevanje:

- nadgraditi razumevanje postopkov in orodij za analizo in uporabo stohastičnih modelov,
- spoznati raziskovalno področje stohastičnih procesov in ga prepoznati kot morebitno polje bodočega znanstvenega dela,
- pridobiti poglobljeno razumevanje iz teorije stohastičnih procesov ter uporabe stohastičnih modelov,
- se usposobiti za samostojno znanstveno raziskovalno delo na tem področju,
- se usposobiti za predstavitev svojega raziskovalnega dela (članki, referati),
- spoznati uporabne vsebine in se naučiti systemskega razmišljanja, kako pristopiti k reševanju realnih problemov,
- pridobiti razumevanje teoretičnih ozadij, nujno potrebnih za interpretacijo dobljenih rezultatov računalniških orodij in ocenitev kakovosti razvitih stohastičnih in statističnih modelov.

##### Prenesljive/ključne spretnosti in drugi atributi:

Zmožnost sodelovanja pri reševanju zahtevnejših problemov stohastične narave v logističnih okoljih. Obvladovanje znanstvenih podlag in praktičnih spretnosti za nadaljnji študij in delo v logističnih in nelogističnih podjetjih.

#### Intended learning outcomes:

##### Knowledge and Understanding:

- to enhance the understanding of procedures and tools for the construction of stochastic models,
- to get familiar with scientific field of stochastic processes and recognize it as a possible field of future scientific work,
- to get the ability to co-operate in solving more complicated stochastic problems in logistics,
- to qualify for independent research and scientific work in this field,
- to qualify for presentation of scientific work by the means of publishing (papers),
- to get familiar with useful contents and to gain the possibility of systematical thinking about solving of real problems,
- to gain the understanding of theoretical background, necessary for the interpretation of achieved results given by computer software and to verify the quality of developed stochastic and statistical models.

##### Transferable/Key Skills and other attributes:

The ability to co-operate in solving more complicated stochastic problems in logistics. Understanding scientific and practical competences for further studies and work in logistical and non-logistical companies.

#### 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-vaj (e-vaje se lahko izvajajo

#### Learning and teaching methods:

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).

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-

na videokonferenčni način ali s pomočjo posebej v ta namen didaktično pripravljenih e-gradiv v virtualnem elektronskem učnem okolju).

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 %) /<br>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.                                 |
| <ul style="list-style-type: none"> <li>• Opravljen seminar.</li> <li>• Pisni izpit.</li> <li>• Ustni izpit.</li> </ul> | <ul style="list-style-type: none"> <li>30%</li> <li>40%</li> <li>30%</li> </ul> | <ul style="list-style-type: none"> <li>• Coursework.</li> <li>• Written examination.</li> <li>• Oral examination.</li> </ul> |

Reference nosilca / Lecturer's references:

1. **Marko INTIHAR, Tomaž KRAMBERGER, Dejan DRAGAN.** Container Throughput Forecasting Using Dynamic Factor Analysis and ARIMAX Model. *Promet – Traffic&Transportation engineering*, ISSN 0353-5320. [Print ed.], 2017, vol. 29, no. 5, str. 529-542. [JCR, SNIP, WoS]. doi: 10.7307/ptt.v29i5.2334.
2. **DRAGAN, Dejan, ROSI, Bojan, AVŽNER, Toni.** Synergies between an observed port and a logistic company : application of the discounted cash-flow model and the Monte Carlo simulation. *Logistics & sustainable transport*, ISSN 2232-4968. [Spletna izd.], May 2017, vol. 8, no. 1, str. 1-18, ilustr. <https://doi.org/10.1515/jlst-2017-0001>, doi: 10.1515/jlst-2017-0001. [COBISS.SI-ID 512846141]
3. **TOPOLŠEK, Darja, DRAGAN, Dejan.** Integration of travel agencies with other supply chain members : impact on efficiency. *Logistics & sustainable transport*, ISSN 2232-4968. [Spletna izd.], Oct. 2016, vol. 7, no. 1, str. 1-17. <https://www.degruyter.com/downloadpdf/j/jlst.2016.7.issue-1/jlst-2016-0001/jlst-2016-0001.xml>, doi: 10.1515/jlst-2016-0001. [COBISS.SI-ID 512794173]
4. **TOPOLŠEK, Darja, DRAGAN, Dejan.** Relationships between the motorcyclists' behavioural perception and their actual behaviour. *Transport*, ISSN 1648-3480. [Online ed.]. <http://www.tandfonline.com/doi/abs/10.3846/16484142.2016.1141371>, doi: 10.3846/16484142.2016.1141371. [COBISS.SI-ID 512755261], [JCR, SNIP, Scopus do 31. 8. 2017: št. citatov (TC): 1, čistih citatov (CI): 1]
5. **KOVAČIĆ, Nataša, TOPOLŠEK, Darja, DRAGAN, Dejan.** Tourism sector, travel agencies, and transport suppliers : comparison of different estimators in the structural equation modeling. *Logistics & sustainable transport*, ISSN 2232-4968. [Spletna izd.], 2015, vol. 6, iss. 1, str. 11-24. <http://www.degruyter.com/view/j/jlst.2015.6.issue-1/jlst-2015-0007/jlst-2015-0007.xml?format=INT>, doi: 0.1515/jlst-2015-0007. [COBISS.SI-ID 512729661]
6. **TOPOLŠEK, Darja, DRAGAN, Dejan.** Behavioural comparison of drivers when driving a motorcycle or a car : a structural equation modelling study. *Promet*, ISSN 0353-5320. [Print ed.], 2015, vol. 27, no. 6, str. 457-466, ilustr. <http://www.fpz.unizg.hr/traffic/index.php/PROMTT/issue/view/163>. [COBISS.SI-ID 512739133], [JCR, SNIP, WoS do 13. 2. 2016: št. citatov (TC): 0, čistih citatov (CI): 0, Scopus do 20. 1. 2016: št. citatov (TC): 0, čistih citatov (CI): 0]
7. **KRAMBERGER, Tomaž, DRAGAN, Dejan, PRAH, Klemen.** A heuristic approach to reduce carbon dioxide emissions. *Proceedings of the Institution of Civil Engineers - Transport*, ISSN 0965-092X. [Print ed.], Okt. 2014, vol. 167, iss. 5, str. 296-305. <http://www.icevirtuallibrary.com/content/article/10.1680/tran.11.00053>, doi: 10.1680/tran.11.00053. [COBISS.SI-ID 512554557], [JCR, SNIP, WoS do 12. 1. 2015: št. citatov (TC): 1, čistih citatov (CI): 1, Scopus do 27. 9. 2017: št. citatov (TC): 2, čistih citatov (CI): 2]
8. **DRAGAN, Dejan, VIZINGER, Tea, INTIHAR, Marko, KRAMBERGER, Tomaž, FOŠNER, Maja, PRAH, Klemen.** Reconstruction of delivery positions in the city of Celje, Slovenia. *Transport problems : international scientific journal*, ISSN 1896-0596. [Printed ed.], 2013, vol. 8, iss. 2, str. 11-24. [http://www.transportproblems.polsl.pl/pl/Archiwum/2013/zeszyt2/2013t8z2\\_02.pdf](http://www.transportproblems.polsl.pl/pl/Archiwum/2013/zeszyt2/2013t8z2_02.pdf). [COBISS.SI-ID 512516157], [SNIP, Scopus do 17. 8. 2013: št. citatov (TC): 0, čistih citatov (CI): 0]
9. **DRAGAN, Dejan, KRAMBERGER, Tomaž, LISEC, Andrej, INTIHAR, Marko, PRAH, Klemen.** Using GIS for the optimization of pupils transportation : the case of Laško municipality. *Logistics & sustainable transport*, ISSN 1854-3332. [Tiskana izd.], 3. sept. 2011, vol. 2, no. 3, str. 35-51. <http://jlst.fl.uni-mb.si/index.php/journal/article/view/32>. [COBISS.SI-ID 512357437]
10. **DRAGAN, Dejan, KRAMBERGER, Tomaž, LIPIČNIK, Martin.** Monte Carlo simulation-based approach to optimal bus stops allocation in the Municipality of Laško. *Promet*, ISSN 0353-5320. [Print ed.], 2011, vol. 23, no. 4, str. 265-278. [COBISS.SI-ID 512342333], [JCR, SNIP, WoS do 5. 2. 2015: št. citatov (TC): 1, čistih citatov (CI): 0, Scopus do 31. 8. 2017: št. citatov (TC): 3, čistih citatov (CI): 3]
11. **DRAGAN, Dejan.** Fault detection of an industrial heat-exchanger : a model-based approach. *Strojniški vestnik*, ISSN 0039-2480, jun. 2011, vol. 57, no. 6, str. 477-484, ilustr., doi: 10.5545/sv-jme.2010.128. [COBISS.SI-ID 512232253], [JCR, SNIP, WoS do 6. 7. 2016: št. citatov (TC): 4, čistih citatov (CI): 4, Scopus do 25. 11. 2016: št. citatov (TC): 7, čistih citatov (CI): 7]
12. **DRAGAN, Dejan, JURČIČ, Đani, STRMČNIK, Stanko.** Modelling for condition monitoring : application to a heat transfer process. *Process control and quality*, ISSN 0924-3089, 2000, vol. 11, str. 419-431. [COBISS.SI-ID 15697191], [JCR, WoS do 15. 2. 2013: št. citatov (TC): 1, čistih citatov (CI): 0]
13. **DRAGAN, Dejan, LISEC, Andrej, KRAMBERGER, Tomaž, INTIHAR, Marko.** The impact of macroeconomic indicators on forecasting a total cargo throughput in the Adriatic seaport. V: PAWAR, Kulwant S (ur.), POTTER, Andrew (ur.), LISEC, Andrej (ur.). *Data driven supply chains : The proceedings of 22nd International Symposium on Logistics, Ljubljana, Slovenia, 9-12th July 2017*. Nottingham: Business School. cop. 2017, str. 502-511. <http://www.isl21.org/wp-content/uploads/2017/07/Full-paper->

**14. POPOVIĆ, Vlado, DRAGAN, Dejan, JEREB, Borut.** Electric vehicles as an electricity storage in electricity supply chain. V: VIDOVIĆ, Milorad (ur.). *Proceedings of the 3rd Logistics International Conference, Belgrade, 25-27 May, 2017*. Belgrade: Faculty of Transport and Traffic Engineering. 2017, str. 173-178. <http://logic.sf.bg.ac.rs/wp-content/uploads/2017/LOGIC%202017%20Proceedings%20b5.pdf>. [COBISS.SI-ID 512849213]

**15. POPOVIĆ, Vlado, DRAGAN, Dejan, JEREB, Borut.** Stabilizing electric power from solar photovoltaic panels by using electric vehicles. V: *Solaris Conference 2017 : Darwin/Newton North, Hamilton Centre, London, 27 July 2017 to 28 July 2017*. London: Brunel University. 2017, [6] str. [COBISS.SI-ID 512865085]

**16. DRAGAN, Dejan, KRAMBERGER, Tomaž, TOPOLŠEK, Darja.** Supply chain integration and firm performance in the tourism sector. V: IPAVEC, Vesna Mia (ur.), KRAMBERGER, Tomaž (ur.). *Pre-conference proceedings of the 12th International Conference on Logistics & Sustainable Transport 2015, University of Maribor, Faculty of Logistics, Celje, Slovenia, 11-13 June 2015*. Celje: Faculty of Logistics. 2015, str. 30-47, ilustr. [COBISS.SI-ID 512678973]

**17. INTIHAR, Marko, KRAMBERGER, Tomaž, DRAGAN, Dejan.** The relationship between the economic indicators and the accuracy of container throughput forecasting. V: *The role of maritime clusters and innovation in shaping future global trade*. [S. l.: s. n. 2015], str. 1-25, ilustr. [COBISS.SI-ID 512700221]

**18. DRAGAN, Dejan, KRAMBERGER, Tomaž, INTIHAR, Marko.** A comparison of methods for forecasting the container throughput in North Adriatic ports. V: *IAME 2014 : conference proceedings*, International Association of Maritime Economists Conference, IAME 2014, Norfolk, 15-18 July 2014. Norfolk: [S. n.]. 2014, 21 str. [COBISS.SI-ID 512589373]

**19. DRAGAN, Dejan, KRAMBERGER, Tomaž.** Forecasting the container throughput in the Port of Koper using time series ARIMA model. V: IPAVEC, Vesna Mia (ur.), KRAMBERGER, Tomaž (ur.). *Pre-conference proceedings of the 11th International Conference on Logistics & Sustainable Transport 2014, Celje, Slovenia, 19-21 June 2014*. Celje: Faculty of Logistics. 2014, [12] str. [COBISS.SI-ID 512579133]

**20. DRAGAN, Dejan, TOPOLŠEK, Darja.** Introduction to structural equation modeling : review, methodology and practical applications. V: IPAVEC, Vesna Mia (ur.), KRAMBERGER, Tomaž (ur.). *Pre-conference proceedings of the 11th International Conference on Logistics & Sustainable Transport 2014, Celje, Slovenia, 19-21 June 2014*. Celje: Faculty of Logistics. 2014, [27] str. [COBISS.SI-ID 512579389]

**21. DRAGAN, Dejan, PRAH, Klemen, KRAMBERGER, Tomaž, FOŠNER, Maja.** Reduction of GHG emissions based on a heuristic optimization approach. V: DOLINOV, F. F. (ur.). *Logističeske sistemy v global'noj èkonomike : materialy meždunarodnoj naučno-praktičeskoj konferencii (14-15 marta 2013 g., Krasnojarsk) v 2-h častjah. Čast' 1, Naučno-issledovatel'skij sektor = Logistics systems in global economy : proceedings of international scientific-practical conference (March 14-15, 2013, Krasnoyarsk) in 2 parts. Part 1, Science and research department*. Krasnojarsk: Sibirskij gosudarstvennyj aërokosmičeskij universitet imeni akademika M. F. Rešetneva. cop. 2013, str. 7-21. [COBISS.SI-ID 512488765]

**22. GYÖRKÖŠ, Staša, DRAGAN, Dejan.** A stochastic continuous review model of inventory control and the case of real trade enterprise. V: RAMŠAK, Rok (ur.). *Book of proceedings : a collection of papers of The 1st International Logistics Symposium for Students 2010*. Celje: Faculty of logistics. 2010, str. 102-118, graf. prikazi. [COBISS.SI-ID 15349813]

**23. PRAH, Klemen, ŠTRUBELJ, Gregor, RUPNIK, Bojan, KRAMBERGER, Tomaž, DRAGAN, Dejan.** GIS pri študiju in raziskovalnem delu v logistiki. V: CIGLIČ, Rok (ur.), et al. *Digitalni podatki, (GIS v Sloveniji, ISSN 1855-4954, 13)*. 1. izd. Ljubljana: Založba ZRC. 2016, str. 209-221, zvd. [COBISS.SI-ID 40216365]

**24. DRAGAN, Dejan, KRAMBERGER, Tomaž, TOPOLŠEK, Darja.** Efficiency and travel agencies : Bayesian structural equation model. V: KRAMBERGER, Tomaž (ur.), POTOČAN, Vojko (ur.), IPAVEC, Vesna Mia (ur.). *Sustainable logistics and strategic transportation planning, (Advances in logistics, operations, and management science book series (Print), ISSN 2327-350X)*. Hershey: IGI Global. cop. 2016, str. 211-235, ilustr. <http://www.igi-global.com/book/sustainable-logistics-strategic-transportation-planning/141939>, doi: 10.4018/978-1-5225-0001-8.ch010. [COBISS.SI-ID 512762173]

**25. DRAGAN, Dejan, KRAMBERGER, Tomaž, PRAH, Klemen.** Transport optimization and estimation of reduced CO2 emissions. V: KRAMBERGER, Tomaž (ur.), POTOČAN, Vojko (ur.), IPAVEC, Vesna Mia (ur.). *Sustainable logistics and strategic transportation planning, (Advances in logistics, operations, and management science book series (Print), ISSN 2327-350X)*. Hershey: IGI Global. cop. 2016, str. 405-436, ilustr. <http://www.igi-global.com/book/sustainable-logistics-strategic-transportation-planning/141939>, doi: 10.4018/978-1-5225-0001-8.ch019. [COBISS.SI-ID 512762429]

**26. INTIHAR, Marko, DRAGAN, Dejan.** Heuristic based optimization approach for the transportation of pupils in the Municipality of Žalec. V: SCHLIEPHAKE, Konrad (ur.), ROSI, Bojan (ur.), STERNAD, Marjan (ur.). *Transport research in a changing world : case studies from Slovenia and Germany = Verkehrsanalysen im wandelnden Raumbezug : Fallstudien aus Slowenien und Deutschland, (Würzburger geographische Manuskripte, ISSN 0931-8623, 82)*. Würzburg: Geographisches Institut der Universität Würzburg. 2014, str. 168-186. [COBISS.SI-ID 512603453]

**27. DRAGAN, Dejan, KRAMBERGER, Tomaž, PRAH, Klemen.** The reduction of CO2 emissions : transport optimization approach to decrease the vehicle miles travelled. V: SCHLIEPHAKE, Konrad (ur.), ROSI, Bojan (ur.), STERNAD, Marjan (ur.). *Transport research in a changing world : case studies from Slovenia and Germany = Verkehrsanalysen im wandelnden Raumbezug : Fallstudien aus Slowenien und Deutschland, (Würzburger geographische Manuskripte, ISSN 0931-8623, 82)*. Würzburg: Geographisches Institut der Universität Würzburg. 2014, str. 199-230. [COBISS.SI-ID 512603965]

**28. DRAGAN, Dejan.** *Napovedovanje prihodnjih trendov v tovornem prometu za Slovenijo do leta 2030*. Celje: Fakulteta za logistiko, 2016. [10] str., ilustr. [COBISS.SI-ID 512783933]

**29. DRAGAN, Dejan.** *Analiza sinergijskih učinkov med Luko Koper in skupino TTI na osnovi napredne prediktivne metodologije : poročilo o študiji*. Celje: Fakulteta za logistiko, 2015. 50 str., ilustr. [COBISS.SI-ID 512783677]

**30. DRAGAN, Dejan, INTIHAR, Marko, PRAH, Klemen, KRAMBERGER, Tomaž.** *Forecasting of maritime cargo flows to support the*

*planning activities in NAPA ports : the preliminary research study : Research Project: Planning, Optimization, Modernization and Redesign of Port Activities in NAPA ports.* Celje: Faculty of logistics, 2013. 245 str., graf. prikazi. [COBISS.SI-ID [512508477](#)]

**31. DRAGAN, Dejan, JEREB, Borut.** *Introduction to queuing models : working paper.* Celje: Faculty of logistics, 2013. 114 str., graf. prikazi. <http://blend.fl.uni-mb.si/>. [COBISS.SI-ID [512502589](#)]

**32. DRAGAN, Dejan, ROSI, Bojan, AVŽNER, Toni.** *Kratko mnenje o študiji "Ocena metodologije študij vrednotenja podjetja Trade Trans Invest A.C. in predvidenih sinergij med njim in Luko Koper d.d."*. Celje: Fakulteta za logistiko, 2016. 12 str. [COBISS.SI-ID [512784445](#)]

**33. DRAGAN, Dejan, ROSI, Bojan, AVŽNER, Toni.** *Finančni učinki povečanja pretovora LK zaradi sinergij s holdingom TTI : pripombe na izvedensko mnenje o zadevi.* Celje: Fakulteta za logistiko, 2015. 48 str. [COBISS.SI-ID [512784189](#)]

#### **Recenzent**

**34. Anali PAZU. Dragan, Dejan** (recenzent 2017). Murska Sobota: PAZU, 2011-. ISSN 2232-416X. [COBISS.SI-ID [257553152](#)]

**133. Logistics & sustainable transport. Dragan, Dejan** (recenzent 2014-2017). [Spletna izd.]. Celje: Fakulteta za logistiko, 2007-. ISSN 2232-4968. <http://ilst.fl.uni-mb.si/>, <http://www.degruyter.com/view/i/ilst>. [COBISS.SI-ID [259554560](#)]

**35. Promet. Dragan, Dejan (recenzent 2015, 2017).** [Print ed.]. Zagreb: Fakultet prometnih znanosti; Portorož: Fakulteta za pomorstvo in promet; Trieste: Università degli studi di Trieste, Istituto per lo studio dei trasporti nell'integrazione economica europea; Sarajevo: Fakultet za saobraćaj i komunikacije; Žilina: Fakulta prevádzky a ekonomiky dopravy a spojov; Pardubice: Dopravní fakulta Jana Pernera, 1989-. ISSN 0353-5320. <http://www.fpz.unizg.hr/traffic/index.php/PROMTT>. [COBISS.SI-ID [1416196](#)]

**36. PloS one. Dragan, Dejan (recenzent 2014-2015).** San Francisco (CA): Public Library of Science, 2006-. ISSN 1932-6203. [COBISS.SI-ID [2005896](#)]

**37. JEREB, Borut.** *Večparametrski odločitveni model za logistike z dodanimi večpredstavnimi vsebinami : visokošolski učbenik z recenzijo.* Celje: Fakulteta za logistiko, 2015. ISBN 978-961-6962-15-5. <http://labinf.fl.uni-mb.si/vecparametrski-odlocitveni-model/>. [COBISS.SI-ID [282247936](#)]

**38. PUŠENJAK, Rudi, OBLAK, Maks, FOŠNER, Maja.** *Osnove modeliranja dinamičnih procesov v logistiki. 2.* Celje: Fakulteta za logistiko, 2013. VI, 110 str., graf. prikazi. <http://blend.fl.uni-mb.si/>. [COBISS.SI-ID [512501821](#)]

**39. PUŠENJAK, Rudi, OBLAK, Maks, LIPIČNIK, Martin.** *Osnove modeliranja dinamičnih procesov v logistiki. 1.* Celje: Fakulteta za logistiko, 2012. IV, 84 str., graf. prikazi. <http://blend.fl.uni-mb.si/>. [COBISS.SI-ID [72628225](#)]

#### **Opomba:**

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