

**UČNI NAČRT PREDMETA/COURSE SYLLABUS**

Predmet: Course title:	MANAGEMENT TRAJNOSTNEGA TRANSPORTA IN INTEGRACIJA V OSKRBOVALNE VERIGE SUSTAINABLE TRANSPORT MANAGEMENT AND INTEGRATION IN SUPPLY CHAINS
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Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
LOGISTIKA SISTEMOV 3. stopnja		1.	1. in 2.
SYSTEM LOGISTICS 3 <sup>rd</sup> degree		1.	1. in 2.

Vrsta predmeta / Course type: IZBIRNI

Univerzitetna koda predmeta / University course code: DR

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Laboratory work	Druge oblike študija Field work	Samost. delo Individ. work	ECTS
20					160	6

Nosilec predmeta / Lecturer: MATJAŽ KNEZ

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:	Content (Syllabus outline):
Trajnostni transport Trajnostno delovanje oskrbovalnih verig Politike in direktive EU glede trajnostnega transporta Trajnostna mobilnost in zelene tehnologije Alternativna goriva in tehnologije v trajnostnem transportu Elektromobilnost kot resna alternativa Integracija zelenih tehnologij v trajnostne oskrbovalne verige Management trajnostnega transporta ter presoja vpliva na okolje Načrtovanje trajnostnih poslovnih modelov in sistemov z integracijo novih, zelenih, trajnostnih tehnologij	Sustainable transport Sustainable functioning of supply chains EU policies and directives on sustainable transport Sustainable mobility and green technologies Alternative fuels and technologies in sustainable transport Electromobility as a serious alternative Integration of green technologies into sustainable supply chains Management of sustainable transport and environmental impact assessment Designing sustainable business models and systems by integrating new, green, sustainable technologies

**Temeljni literatura in viri / Readings:**

Hughes J., Ralf M., Michels B. Transform your Supply Chain. Releasing Value in Business. 1998. Thomson Business Press. ISBN: 1-86152-054-9.

Easty D.C., Winston A.S. Green to Gold. How smart companies use environmental strategy to innovate, create value and build competitive advantage. 2006. Wiley. ISBN: 978-0-470-39374-1.

Sarkis J. Greening the Supply Chain. 2006. Springer. ISBN: 978-1-946282980.

Wang H.F., Gupta S.M. Green Supply Chain Management. Product Life Cycle Approach. 2011. McGraw Hill. ISBN 978-0-07-162283-7.

McKinnon A., Browne M., Whiteing A. Green Logistics. Improving the environmental sustainability of logistics. 2012. Elsevier. ISBN 978-0-7494-6625-1.

Grant D.B., Trautrim A., Wong C.Y. Sustainable logistics and supply chain management. 2012. Kogan Page. ISBN: 978-

0-7494-6866-8.

Golinska P., Hajdul M. Sustainable transport. New Trends and Business Practices. 2016. Springer.

Muneer M., Kolhe M., Doyle A. Electric Vehicles: Prospects and Challenges. 2017, Elsevier ISBN 978-01-2803021-9

Nova aktualna literatura s področja trajnostnega transporta in trajnostnih oskrbovalnih verig (knjige, članki, zborniki,...)

Cilji in kompetence:

- nadgraditi razumevanje trajnostnega delovanja s poudarkom na trajnostnem transportu,
- nadgraditi poznavanje zelenih tehnologij ter postopkov in orodij za integracijo v logistične oskrbovalne verige,
- spoznati raziskovalno področje trajnostnih oskrbovalnih verig in trajnostnega transporta ter ga prepoznati kot morebitno polje bodočega znanstvenega dela,
- se usposobiti za učinkovito presojo problemov in načrtovanje trajnostnih poslovnih modelov,
- se usposobiti za samostojno znanstveno raziskovalno delo na tem področju,
- se usposobiti za predstavitev s svojega raziskovalnega dela (članki, referati).

Objectives and competences:

- upgrade understanding of sustainable action with a focus on sustainable transport,
- to upgrade knowledge of green technologies and procedures and tools for integration into logistics supply chain,
- to get to know the research area of sustainable supply chains and sustainable transport and to identify it as a possible field of future scientific work,
- be trained to effectively assess problems and design sustainable business models,
- be trained for independent scientific research work in this field,
- get ready for presentation from your research work (articles, papers).

Predvideni študijski rezultati:

Znanje in razumevanje:

- Študenti se naučijo in razumejo pomen poznavanja trajnostnega transporta in trajnostnega delovanja tako na nivoju podjetja, oskrbovalne verije in nivoju družbe.
- Se naučijo in razumejo pomen poznavanja alternativnih zelenih tehnologij
- Se naučijo in razumejo filozofijo upravljanja, vodenja in presoje trajnostnih oskrbovalnih verig.
- Se naučijo pristopa k znanstvenemu proučevanju trajnostnega transporta in procesov in stanj v trajnostnih oskrbovalnih verig.
- Razumejo in znajo razvijati modele procesov in optimiranja stanj trajnostnih oskrbovalnih verig s poudarkom na trajnostnem transport in integraciji zelenih tehnologij.

Prenesljive/ključne spretnosti in drugi atributi:

- Študenti se naučijo pristopa razvijanja različnih trajnostnih modelov realnosti.

Intended learning outcomes:

Knowledge and Understanding:

- Students learn and understand the importance of sustainable transport and knowing how to work sustainably at both company level, supply chain and society level.
- Learn and understand the importance of knowing alternative green technologies
- They learn and understand philosophy of management, governance and sustainability assessment of supply chains.
- They learn to approach scientific study of sustainable transport and processes and states in sustainable supply chains
- Understand and know how to develop models processes and optimization of the situation of sustainable supply chains with an emphasis on sustainable transport and the integration of green technologies.

Transferable / Key Skills and other attributes:

- Students learn how to develop different approaches of sustainable models of reality.

Metode poučevanja in učenja:

Individualno raziskovalno delo, razgovor, študij gradiva.

Learning and teaching methods:

Individual research work, dialogues, study of materials.

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
Raziskovalna naloga.	50%	Research work.
Ustni izpit.	50%	Oral examination.

Reference nosilca / Lecturer's references:

MUNEER, Tariq, MILLIGAN, Ross, SMITH, Ian, DOYLE, Aisling, POZUELO, Miguel, KNEZ, Matjaž. Energetic, environmental and economic performance of electric vehicles: experimental evaluation. Transportation research. Part D, Transport and environment, ISSN 1361-9209. [Print ed.], 2015, vol. 35, no. [1], str. 40-61.

KNEZ, Matjaž, JEREB, Borut, OBRECHT, Matevž. Factors influencing the purchasing decisions of low emission cars: a study of Slovenia. Transportation research. Part D, Transport and environment, ISSN 1361-9209. [Print ed.], July 2014, vol. 30, str. 53-61.

KNEZ, Matjaž, MUNEER, Tariq, JEREB, Borut, CULLINANE, Kevin. The estimation of a driving cycle for Celje and a comparison to other European cities. Sustainable cities and society, ISSN 2210-6715. [Spletna izd.], Feb. 2014, vol. 11, str. 56-60.

KNEZ, Matjaž, JEREB, Borut. Solar power plants - alternative sustainable approach to greener environment: a case of Slovenia. Sustainable cities and society, ISSN 2210-6715. [Spletna izd.], Feb. 2013, vol. 6, str. 27-32.

GAGO, E. J., MUNEER, Tariq, KNEZ, Matjaž, KÖSTER, Helmut. Natural light controls and guides in buildings: energy saving for electrical lighting, reduction of cooling load. Renewable & sustainable energy reviews: an international journal, ISSN 1364-0321. [Print ed.], 2015, vol. 41, str. 1-13.

Muneer M., Kolhe M., Doyle A. Electric Vehicles: Prospects and Challenges. 2017, Elsevier (Knez M. - avtor samostojnega poglavja z naslovom: Sustainable transport, Electric vehicle promotional policies and Factors influencing the purchasing decisions of electric vehicles: A case of Slovenia).