

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Ime predmeta:	MANAGEMENT TRAJNOSTNEGA TRANSPORTA IN INTEGRACIJA V OSKRBOVALNE VERIGE
Course title:	SUSTAINABLE TRANSPORT MANAGEMENT AND INTEGRATION IN 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 rd degree		1.	1. in 2.

**Vrsta predmeta (obvezni ali izbirni) /
Course type (compulsory or elective)**

IZBIRNI
ELECTIVE

Univerzitetna koda predmeta / University course code:

DR

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

Nosilec predmeta / Course coordinator:

MATJAŽ KNEZ

Jeziki /Languages:

Predavanja / Lectures: SLOVENSKI/SLOVENE

Vaje / Tutorial: SLOVENSKI/SLOVENE

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

Ni pogojev.

Prerequisites for enrolling in the course or for performing study obligations:

None.

Vsebina (kratek pregled učnega načrta):

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

Content (syllabus outline):

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 / Reading materials:

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., Trautrimis 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:

- to upgrade understanding of sustainable action with a focus on sustainable transport,
- to upgrade the 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 verige 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.

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

- Razumejo in znajo razvijati modele procesov in optimiranja stanj trajnostnih oskrbovalnih verig s poudarkom na trajnostnem transportu in integraciji zelenih tehnologij.
- Prenesljive/ključne spretnosti in drugi atributi:
- Študenti se naučijo pristopa razvijanja različnih trajnostnih modelov realnosti.

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 %) / Share (in %)	Assessment methods:
Raziskovalna naloga.	50%	Research work.
Ustni izpit.	50%	Oral examination.

Reference nosilca / Course coordinator's references:

1. KNEZ, Matjaž, KOŽELJ ZEVNIK, Gašper, OBRECHT, Matevž. A review of available chargers for electric vehicles. Renewable & sustainable energy reviews : an international journal, ISSN 1364-0321. [Print ed.], Jul. 2019, vol. 109, str. 284-293, ilustr. <https://doi.org/10.1016/j.rser.2019.04.013>, doi: 10.1016/j.rser.2019.04.013. [COBISS.SI-ID 512988989], [JCR, SNIP, WoS do 15. 9. 2019: št. citatov (TC): 1, čistih citatov (CI): 1, čistih citatov na avtorja (CIAu): 0.33, Scopus do 29. 11. 2019: št. citatov (TC): 3, čistih citatov (CI): 3, čistih citatov na avtorja (CIAu): 1.00] kategorija: 1A1 (Z, A'', A', A1/2); uvrstitev: SCI, Scopus, MBP; tip dela je verificiral OSICD

2. OBRECHT, Matevž, KNEZ, Matjaž. Carbon and resource savings of different cargo container designs. Journal of cleaner production, ISSN 1879-1786. [Online ed.], 1 Jul. 2017, vol. 155, 151-156 str. <https://doi.org/10.1016/j.jclepro.2016.11.076>, doi: 10.1016/j.jclepro.2016.11.076. [COBISS.SI-ID 512811837], [JCR, SNIP, WoS do 13. 10. 2019: št. citatov (TC): 11, čistih citatov (CI): 10, čistih citatov na avtorja (CIAu): 5.00, Scopus do 29. 11. 2019: št. citatov (TC): 14, čistih citatov (CI): 13, čistih citatov na avtorja (CIAu): 6.50] kategorija: 1A1 (Z, A'', A', A1/2); uvrstitev: Scopus (d), SCI, Scopus, MBP; tip dela je verificiral OSICT

3. KNEZ, Matjaž, JEREB, Borut, JADRAQUE GAGO, Eulalia, ROSAK-SZYROCKA, Joanna, OBRECHT, Matevž. Features influencing policy recommendations for the promotion of zero emission vehicles in Slovenia, Spain, and Poland. Clean technologies and environmental policy, ISSN 1618-9558. [Online ed.]. <https://doi.org/10.1007/s10098-020-01909-9>, doi: 10.1007/s10098-020-01909-9. [COBISS.SI-ID 26988291], [JCR, SNIP, WoS do 7. 11. 2021: št. citatov (TC): 5, čistih citatov (CI): 3, čistih citatov na avtorja (CIAu): 0.60, Scopus do 15. 10. 2021: št. citatov (TC): 5, čistih citatov (CI): 3, čistih citatov na avtorja (CIAu): 0.60] kategorija: 1A2 (Z, A', A1/2); uvrstitev: Scopus (d), SCI, Scopus, MBP; tip dela še ni verificiran točke: 18.18, št. avtorjev: 5