UČNI NAČRT PREDMETA/COURSE SYLLABUS	
Predmet:	UPRAVLJANJE IN VODENJE ZELENE OSKRBOVALNE VERIGE
Course title:	MANAGEMENT IN GREEN SUPPLY CHAINS

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
GOSPODARSKA IN TEHNIŠKA LOGISTIKA 1.stopnja		2.	4.
PROFESSIONAL HIGHER EDUCATION STUDY PROGRAMME ECONOMIC AND TECHNICAL LOGISTICS 1st degree		2.	4.

Vrsta predmeta / Course type	OBVEZNI
Univerzitetna koda predmeta / University course code:	VS

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Laboratory work	Druge oblike študija Field work	Samost. delo Individ. work	ECTS
21 e-P 24 a-P		21 e-V 24 a-V			90	6

Nosilec predmeta / Lecturer:	MATJAŽ KNEZ
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:

- Zelena trajnostna oskrbovalna veriga.
- Upravljanje, management in vodenje v zelenih oskrbovalnih verigah.
- Zelena logistika in njeni paradoksi v zelenih oskrbovalnih verigah.
- Zelene logistika v logističnih podsistemih zelenih oskrbovalne verige:
  - Zelena nabavna logistika,
  - Zelena notranja (proizvodna) logistika,
  - Zelena skladiščna logistika,
  - Zelena distribucijska logistika,
  - Zelena poprodajna logistika,
  - Razbremenilna logistika in ravnanje z odpadki.
- Varstvo okolja.
- Okoljski stroški.
- Modeli trajnostnega upravljanja in vodenja organizacije ter oskrbovalne verige.
- Primeri dobre prakse upravljanja in vodenja zelenih oskrbovalnih verig v praksi.

Content (Syllabus outline):

- Green sustainable supply chain.
- Governance, management and leadership in green supply chain.
- Green Logistics and its paradoxes in Green supply chain.
- Green logistics in logistics subsystems of green supply chain:
  - Green Purchasing Logistics,
  - Green internal (manufacturing) logistics,
  - Green Warehouse logistics,
  - Green Distribution Logistics,
  - Green after sales logistics,
  - Reverse logistics and waste management.
- Protection of the environment.
- Environmental costs.
- Models for sustainable management and governance of the organization and the supply chain.
- Examples of good management practices and management of green supply chains in practice.

Temeljna literatura in viri/Readings:

Knez M., (2013) Zelene oskrbovalne verige. E-gradivo – v pripravi. Univerza v Mariboru, Fakulteta za logistiko.
Muneer, Tariq, Kolhe, Mohan, Doyle Aisling. Electric Vehicles: Prospects and Challenges, 1st Edition, 2017. ISBN:

9780128030400.
McKinnon A., Browne M., Whiteing A. (2012) Green Logistics, Improving the Environmental Sustainability of Logistics.
Makower J., 2009. Strategies for the Green Economy. McGrawHill, New York.
MacKinnon D., Shaw J., Docherty I. (2008) Diverging Mobilities? Devolution, Transport and policy Innovation. Elsevier.
Esty D.C., Winston A.S. (2009)Green to Gold. How smart companies use environmental strategy to innovate, create value, and build competitive advantage. John Wiley & Sons, Inc. Hoboken New Jersey.
Plevnik A. (2008) Okolje in promet: Slovenija. Ministrstvo za okolje in prostor, Agencija Republike in Slovenije za okolje.
Cetinkaya B., Cuthbertson R., Ewer G., Klass-Wissing T., Piotrowicz W., Tyssen C. (2011) Sustainabele Supply Chain Management. Springer-Verlag Berlin Heidelberg.
Dodatna literatura: Izbrani članki ter nova izdana literatura s področja predmeta.

Cilji in kompetence:

Cilj tega predmeta je:

- razumevanje pojmov: upravljanje, management, vodenje, zelena logistika, zelena oskrbovalna veriga, management zelenih trajnostnih oskrbovalnih verig, okoljski stroški,
- utrjevanje teoretičnih znanj na področju zelenih oskrbovalnih verig in trajnostnega managementa oskrbovalnih verig,
- razumevanje in pomen varstva okolja ter okoljskih zahtev, ki jih postavlja moderna in trajnostna družba,
- spoznati okoljsko zakonodajo in okoljske standarde,
- spoznati alternativne vire energije in nove, zelene tehnologije prihodnosti ter njihovo integracijo v logistične procese,
- spoznati modele trajnostnega upravljanja in vodenja.

Objectives and competences:

The objective of the course is:

• understanding of concepts: governance, management, leadership, green logistics, green supply chain, green sustainable management of supply chains, environmental costs,

• consolidation of theoretical knowledge in the field of green supply chains and sustainable management of supply chains,

• understanding and importance of environmental protection and environmental requirements imposed by modern and sustainable society,

• to recognize environmental legislation and environmental standards,

• to identify alternative sources of energy and new green technologies of the future and their integration into logistics processes,

• recognize the models of sustainable management and leadership.

Predvideni študijski rezultati:

Znanje in razumevanje:

- razumevanje poslovanja logističnih in nelogističnih podjetij v moderni in trajnostno naravnani družbi,
- poznavanje pojmov s področja upravljanja, management, vodenja, zelene logistike in managementa zelenih trajnostnih oskrbovalnih verig,

Prenesljive/ključne spretnosti in drugi atributi:

- študenti se usposobijo za uporabo teoretičnega znanja v praktičnih primerih.

Intended learning outcomes:

Knowledge and understanding:

- understanding operations of logistics and “nonlogistics companies in modern and sustainable society,
- understanding key concepts of governance, management, leadership, green logistics and management of sustainable green supply chains.

Transferable/Key skills and other attributes:

- the ability to apply theoretical knowledge to professional practice.

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

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

aplikativne možnosti. Del vaj se izvaja na klasični način v predavalnici, del pa v obliki e-vaj (e-vaje se lahko izvajajo na videokonferenčni način ali s pomočjo posebej v ta namen didaktično pripravljenih e-gradiv v virtualnem elektronskem učnem okolju).	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-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:
• 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.
• Seminarska naloga in domače naloge.	30%	• Coursework and home work.
• Pisni izpit.	70%	• Written examination.

Reference nosilca / Lecturer's references:

KNEZ, Matjaž, ROSI, Bojan, MULEJ, Matjaž, LIPIČNIK, Martin. Competitiveness by requisitely holistic and innovative logistic management. Promet, ISSN 0353-5320, 2010, vol. 22, no. 3, str. 229-237. [COBISS.SI-ID 10305052].

KNEZ, Matjaž, PREDIN, Andrej, ROSI, Bojan. 'Forklift to grid' - how to synergise the electricity and logistics sectors = 'Viličar na omrežje' - kako sinergijsko povezati električno omrežje z logističnim sektorjem. *Journal of energy technology*, May 2012, vol. 5, iss. 2, str. 13-27. http://www.fe.uni-mb.si/images/stories/jet/e-jet/jet_5-2.pdf. [COBISS.SI-ID 1024091228]

KNEZ, Matjaž, PREDIN, Andrej, ROSI, Bojan. Poslovni model OVE/F2G V.1 za učinkovitejši energetski menedžment logističnih podjetij. *Proj. mreža Slov.*, apr. 2012, letn. 15, št. 1, str. 10-17, 43, ilustr. [COBISS.SI-ID 1024084572]

STERNAD, Marjan, KNEZ, Matjaž, ROSI, Bojan. Improving city transport with the objective to reduce CO[sub]2 emissions. *Transport problems*, 2010, vol. 5, iss. 4, str. 95-103. http://transportproblems.polsl.pl/pl/Archiwum/2010/zeszyt4/2010t5z4_12.pdf. [COBISS.SI-ID 512283197]

STERNAD, Marjan, TOPOLŠEK, Darja, KNEZ, Matjaž. The case of Slovenian international comparative advantage in logistics services. Strategic management, ISSN 1821-3448, 2012, vol. 17, no. 2, str. 22-30, ilustr., tabela. [COBISS.SI-ID 512434237]

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, doi: 10.1016/j.scs.2013.11.010. [COBISS.SI-ID 512556349]

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. http://www.sciencedirect.com/science/article/pii/S1361920914000339, doi: 10.1016/j.trd.2014.05.007. [COBISS.SI-ID 512566077]

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. http://www.sciencedirect.com/science/article/pii/S1361920914001783, doi: 10.1016/j.trd.2014.11.015. [COBISS.SI-ID 512609853]

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, doi: 10.1016/j.scs.2012.07.002. [COBISS.SI-ID 512441149]

KNEZ, Matjaž, STERNAD, Marjan. Solar energised transport solution and customer preferences and opinions about alternative fuel vehicles - the case of Slovenia. Transport problems, ISSN 1896-0596. [Printed ed.], 2015, vol. 10, iss. 3, str. 17-28, ilustr. http://transportproblems.polsl.pl/pl/Archiwum/2015/zeszyt3/2015t10z3_02.pdf. [COBISS.SI-ID 512711997]

KNEZ, Matjaž, CELIK, Ali Naci, MUNEER, Tariq. A sustainable transport solution for a Slovenia town. International journal of low carbon technologies, ISSN 1748-1325. [Online ed.], 2014, [Vol.] 0, str. 1-7, doi: 10.1093/ijlct/ctu007. [COBISS.SI-ID 512557629]

JEREB, Borut, KNEZ, Matjaž, PODBEVŠEK, Nives. High PM10 concentrations in countries of European Union. Crnogorski časopis za ekologiju, ISSN 2337-0149, dec. 2014, vol. 1, no. 2, str. 23-29. [COBISS.SI-ID 512614717] .

OTOREPEC, Sabina, PODBEVŠEK, Nives, JEREB, Borut, KNEZ, Matjaž. Problems with PM10 concentrations in Slovenia and other countries of European Union. Logistyka, 2014, vol. 2014, no. 4, str. 3619-3629. http://czasopismologistyka.pl/index.php?option=com_docman&task=cat_view&gid=305&Itemid=79&limitstart=15.

[COBISS.SI-ID 512615229]
OBRECHT, Matevž, KNEZ, Matjaž. Opportunities for transition to sustainable energy strategy in Slovenia. Strategic management, ISSN 2334-6191, 2014, vol. 19, no. 3, str. 31-37. http://www.ef.uns.ac.rs/sm/archive/SM2014_3.pdf. [COBISS.SI-ID 512586557]
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. http://www.sciencedirect.com/science/article/pii/S1364032114006777, doi: 10.1016/j.rser.2014.08.002. [COBISS.SI-ID 512585021]
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. http://www.sciencedirect.com/science/article/pii/S1361920914001783, doi: 10.1016/j.trd.2014.11.015. [COBISS.SI-ID 512609853]
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]