

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Ime predmeta: VZPOSTAVITEV TRAJNOSTNIH KONCEPTOV DELOVANJA LOGISTIČNEGA PODJETJA
Course title: CREATING SUSTAINABLE BUSINESS CONCEPTS IN LOGISTIC COMPANIES

Študijski program in stopnja Study programme and cycle	Študijska smer Study option	Letnik Year of study	Semester Semester
LOGISTIKA SISTEMOV 2. stopnja		2.	3.
SYSTEM LOGISTICS 2 nd degree		2.	3.

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

IZBIRNI
SELECTIVE

Univerzitetna koda predmeta / University course code:

MAG

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Clinical training	Druge oblike študija Other forms of study	Samost. delo Individual work	ECTS
19 e-P 21 a-P		19 e-V 21 a-V			100	6

**Nosilec predmeta / Course
coordinator:**

MATJAŽ KNEZ, MATEVŽ OBRECHT

Jeziki /Languages:

Predavanja / Lectures: SLOVENSKI/SLOVENE

Vaje / Tutorial: SLOVENSKI/SLOVENE

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

Ni pogojev za sodelovanje pri tem predmetu.

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

There are no prerequisites for this course.

Vsebina (kratek pregled učnega načrta):

- Trajnostni poslovni modeli na primeru logističnih podjetij (Specifike razvoja start-upov v logistiki, Primeri inovativnih poslovnih modelov).
- Management sprememb (vpeljava strateških sprememb v logističnih podjetjih, Upravljanje s spremembami pri vpeljavi zelenih tehnologij, Identificiranje novih poslovnih priložnosti na področju trajnostne logistike).
- CANVAS poslovni model.
- Okoljski standardi in koncepti (ISO, Green SCOR, integracija digitalizacije, trajnosti in poslovnih izboljšav skozi celotne OV).
- Trajnostna potrošnja in proizvodnja (Strateško kolo ekodizajna, Priprava koncepta, strategij in aktivnosti ekodizajna za vpeljavo v logistično podjetje).

Content (syllabus outline):

- Logistics companies based on sustainable business models (Specifics of start-up development in logistics, Cases of innovative business models).
- Change management (strategic changes in logistics, integration of green technology, Identifying new business opportunities in sustainable logistics).
- CANVAS business model.
- Environmental standards and concepts (ISO, Green SCOR, integration of digitalisation and sustainability through the whole supply chain).
- Sustainable consumption and production (Ecodesign concept and strategy wheel, strategies and measures for logistics companies).

Temeljni literatura in viri / Reading materials:

Osnovna literature/Essentialsources:

- Knez, M., Obrecht, M. VZPOSTAVITEV TRAJNOSTNIH KONCEPTOV DELOVANJA LOGISTIČNEGA PODJETJA, E-gradivo v pripravi. Univerza v Mariboru, Fakulteta za logistiko.
- Obrecht, M. (2020). Life cycle management in supply chains. E-gradivo. Univerza v Mariboru, Fakulteta za logistiko.

Izbrana poglavja iz/Some Chapters from.

- Brezet, H. and Van Hemel, C. Ecodesign: A promising approach to sustainable production and consumption. UNEP, Paris, 1997.
- Dolinsek, S. Management tehnologij: Učinkovito obvladovanj tehnoloških sprememb. UP, Koper, 2004.
- Marinova, D. (ed.) The international Handbook on Environmental Technology Management. EE publishing, Cheltenham UK.

Dodatna literature/Additional sources:

- Bouhaddou, I., Benabdelhafid, A., Ouzizi, L. and Benghabrit, Y. Product Lifecycle Management Model for Supply Chain Optimization, IFIP, 2012.

Cilji in kompetence:

Osnovni namen predmeta je identificirati nove poslovne modele s področja delovanja logističnih podjetij ter jih povezati s trajnostnimi koncepti in strategijami za vpeljavo novih pogojev poslovanja.

Temeljni cilji predmeta so:

- Identificirati in primerjalno analizirati ključne poslovne modele v logistiki in OV.
- Primerjalno analizirati in izbirati najprimernejše koncepte trajnostnega poslovanja podjetja.
- Povezati (souporabljati) različna managerska orodja in koncepte za kreiranje zelenih poslovnih modelov.
- Povzeti in formulirati nove poslovne modele, ki ustvarjajo vrednost.
- sintetizirati informacije s področja poslovnih modelov v logistiki, na način, ki je lahko inovativen in vidi uporabno vrednost znanja ali procesov z vidika predmeta in prakse.

Kompetence, ki jih pridobijo študentje:

- Spoznajo in razumejo uporabo novih veščin in konceptov za nove okoliščine.
- Se naučijo samostojnega oblikovanja novih poslovnih modelov in sprejemanja odločitev o primernih strategijah za vpeljavo sprememb.
- Se naučijo uporabe podpornih managerskih orodij (CANVAS, ISO standardi, Ekodizajn strategy wheel).
- Se naučijo praktičnega dela v skupini pri razvoju novih idej in konceptov kot vodja ali kot član.
- Zna pojasniti naloge in ustrezno uporabiti zmožnosti članov skupine.

Objectives and competences:

The course introduces the subject of business models on the field of sustainable logistics operations and its relations with sustainability business concepts and strategies for implementing changes in organisations.

Basic objectives:

- Identify and comparatively analyse core business models in logistics and supply chains.
- Make comparative analysis of most appropriate sustainable business concepts.
- Connect and inter-relate different managerial tools to create new green business models.
- Summarize and formulate new business models that create new value.
- Synthesise information on business models in an innovative way and can see practical value of gained knowledge.

Core competencies:

- Learn and understand use of new skills, concepts and models related to new business environment.
- Can demonstrate initiative and originality in problem solving. Can act autonomously in planning and implementing tasks at a professional or equivalent.
- Are able to use managerial tools (CANVAS, ISO standards, ECODESIGN strategy wheel).
- Can work effectively with a group as leader or member.

- Spoznajo in razumejo delovanje v kompleksnih in/ali posebnih okoliščinah in pomen iniciativnosti pri vpeljavi sprememb na področju trajnostnega razvoja.

Z vidika predmetnika je predmet Vzpostavitev trajnostnih konceptov delovanja logističnega podjetja mogoče opredeliti kot nadgradnjo predmetov vezanih na upravljanje logistike in OV, poslovne procese ter zelene tehnologije in trajnostne oskrbovalne verige ter osnovo za nadaljnji samostojni študij študentov na področju kreiranja in primerjalne analize inovativnih konceptov trajnostnega delovanja logističnih podjetij.

- Can clarify tasks and make appropriate use of the capacities of group members. Is able to use full range of learning resources.
- With critical awareness can undertake analysis of complex, incomplete areas (business models, concepts, strategies) and understands the importance of self-initiatives in managing changes related with business sustainability.

The purpose of the course is seen as an upgrade of logistics and supply chain processes related and green technology and sustainability concepts related bachelor courses and a strong base for further individual or group studies in the field of creating and comparing innovative sustainable logistics companies and business concepts.

Predvideni študijski rezultati:

Znanje in razumevanje:

Ob zaključku predmeta bodo udeleženci:

- pridobili splošno znanje o poslovnih modelih in konceptih in specifično znanje o uporabi poslovnih konceptov v različnih organizacijskih sistemih in okoljih,
- znali identificirati inovativne poslovne modele in jih uporabiti pri oblikovanju koncepta trajnostnega logističnega podjetja,
- razvili sposobnost razumevanja organizacije z vidika managementa sprememb,
- znali uporabiti orodja ekodizajna v logističnih podjetjih,
- znali analizirati praktične probleme povezane s prilagajanjem na strateške spremembe.

Intended learning outcomes:

Development of knowledge and understanding

Knowledge issues

By the end of the course participants should:

- gain the general and specific knowledge of business models and concepts, implementation of business concepts in different organizations, environments,
- be able to identify innovative business models for designing sustainable logistics company operations,
- develop the ability to understand organization from change management perspective,
- use eco-design tools in logistics,
- analyze and discuss practical problems related to strategic changes in logistics organizations.

Metode poučevanja in učenja:

Predmet vključuje različne metode poučevanja in učenja, kot so: predavanja, diskusijske skupine, predstavite del, video predstavitve in filmi, primeri iz prakse, predstavitve študentov in samostojni študij študentov.

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. Praktične strokovne ekskurzije v podjetja. Del vaj se izvaja na klasični

Learning and teaching methods:

This course uses a range of teaching methods including lectures, discussion groups, videos and films, case studies, student presentation and independent study.

Lectures: Students understand the theoretical frameworks of the course. Part of the lecture course is held in standard 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. Excursions to companies. Part of the seminar is in a classroom

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).

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 %) / Share (in %)	Assessment methods:
<ul style="list-style-type: none"> • Opravljene obveznosti e-predavanj in e-vaj so pogoj za pristop k izpitu. • E-predavanja in e-vaje. • Projektna naloga. • Končni pisni izpit. 	<p>20%</p> <p>20%</p> <p>60%</p>	<ul style="list-style-type: none"> • Successful completion of e-lectures and e-tutorials is a prerequisite for entering the exam. • E-lectures and e-tutorials. • Project. • Final written examination.

Reference nosilca / Course coordinator's references:

- OBRECHT, Matevž, KNEZ, Matjaž, SZEGEDI, Zoltan, NICK, Gabor, LISEC, Andrej. Review of Industry 4.0 and forecasting its future within trends in logistics and development of legislation. *Tér gazdaság ember*, ISSN 2064-1176, 2017, vol. 5, no. 4, str. 59-70, ilustr. http://kgk.sze.hu/images/dokumentumok/folyoirat/TGE_V_evf04_ok.pdf.
- 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. kategorija: 1A1 (Z, A'', A', A1/2); uvrstitev: Scopus (d), SCI, Scopus, MBP.
- Omahne Vasja, Knez, Matjaz, Obrecht, Matevž. Social Aspects of Electric Vehicles Research—Trends and Relations to Sustainable Development Goals. *World Electric Vehicle Journal*. 2021; 12(1):15. <https://doi.org/10.3390/wevj12010015> uvrstitev: Scopus (d).
- 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. kategorija: 1A2 (Z, A1/2); uvrstitev: SCI, Scopus, MBP.
- 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. kategorija: 1A1 (Z, A'', A', A1/2); uvrstitev: SCI, Scopus, MBP; tip dela je verificiral OSICD točke: 56.7, št. avtorjev: 3.