

## UČNI NAČRT PREDMETA / COURSE SYLLABUS

**Ime predmeta:** POVRATNA LOGISTIKA  
**Course title:** REVERSE LOGISTICS

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 <sup>rd</sup> 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:**

ANDREJ LISEC

**Jeziki /Languages:**

**Predavanja / Lectures:** SLOVENSKI/SLOVENE

**Vaje / Tutorial:** SLOVENSKI/SLOVENE

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

Ni posebnih omejitev.

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

No special conditions.

**Vsebina (kratek pregled učnega načrta):**

- Pomen reverzibilne logistike v logistični verigi.
- Sodobni trendi reverzibilne logistike.
- Embalaža za večkratno uporabo.
- Recikliranje.
- Problematika nevarnih odpadkov.
- Načrtovanje in modeliranje odvoza odpadkov.

**Content (syllabus outline):**

- The importance of reversible logistics in the logistics chain.
- Modern trends in reversible logistics.
- Reusable packaging.
- Recycling.
- Problems of hazardous waste.
- Planning and modelling of waste removal.

**Temeljni literatura in viri / Reading materials:**

- Harald Dyckhoff, Richard Lackes, Joachim Reese (2004) Supply Chain Management and Reverse Logistics, Springer Science & Business Media, Business & Economics.
- Rommert Dekker, Moritz Fleischmann, Karl Inderfurth, Luk N. van Wassenhove (2004) Reverse Logistics: Quantitative Models for Closed-Loop Supply Chains, Springer Science & Business Media, Business & Economics.
- LISEC, Andrej, ANTIĆ, Slobodan, CAMPUZANO BOLARÍN, Francisco, PEJIĆ, Vaska. An approach to packaging waste reverse logistics : case of Slovenia. Transport, ISSN 1648-3480. [Online ed.], 2017, str. [1-9]. <http://www.tandfonline.com/doi/abs/10.3846/16484142.2017.1326404>, doi:

10.3846/16484142.2017.1326404. [COBISS.SI-ID 512892477], [JCR, SNIP, Scopus do 16. 2. 2018: št. citatov (TC): 0, čistih citatov (CI): 0].

**Cilji in kompetence:**

- Podati povezana znanja reverzibilne logistike s poudarkom na odpadkih.
- Razviti sposobnost študentov za samostojno znanstveno-raziskovalno reševanje problemov reverzibilne logistike.

**Objectives and competences:**

- To provide integrated knowledge of reverse logistics on focus of waste.
- To develop student's capabilities of independent scientific-research solution solving on reverse logistics.

**Predvideni študijski rezultati:**

- Znanje in razumevanje:
- Poznavanje reverzibilne logistike v oskrbovalni verigi.
  - Znati znanstveno in raziskovalno predvideti in uporabiti napredne metode, modele, tehnike pri načrtovanju, oblikovanju reverzibilne logistike.
  - Povezovanje teoretičnih znanj in analitičnih/matematičnih modelov.

Prenesljive/ključne spretnosti in drugi atributi:

- Potrebno znanje za načrtovanje, oblikovanje, modeliranje reverzibilne logistike.
- Poznavanje in uporaba naprednih računalniško podprtih orodjih.

**Intended learning outcomes:**

- Knowledge and understanding:
- Knowledge of reverse logistics in supply chain.
  - Knowledge of proper scientific-research anticipation and application of advanced methods, models, techniques by planning, design of reverse logistics.
  - Integration of theoretical knowledge and analytical/ numerical models.

Transferable/Key Skills and other attributes:

- The necessary engineering knowledge for planning, designing, modelling of reverse logistics.
- The knowledge and the application of the advanced computer-aided tools.

**Metode poučevanja in učenja:**

- Predavanja.
- Konzultacije.
- Samostojno delo.
- Projektno delo ali znanstveni članek.

**Learning and teaching methods:**

- Lectures.
- Consultations.
- Individual work.
- Project work or scientific paper.

**Načini ocenjevanja:**

- Raziskovalna naloga.
- Izpit (teoretično in praktično znanje).

Delež (v %) /

Share (in %)

**Assessment methods:**

- |   |     |   |
|---|-----|---|
| - Raziskovalna naloga.                    | 50% | - Research work.                              |
| - Izpit (teoretično in praktično znanje). | 50% | - Exam (theoretical and practical knowledge). |

**Reference nosilca / Course coordinator's references:**

1. PEJIĆ, Vaska, CEDILNIK, Marko, LISEC, Andrej. Impact on the environment of industrial packaging waste transport. Environmental engineering and management journal, ISSN 1843-3707. [Online ed.], 2017, vol. 16, no. 5, str. 1155-1160. <http://www.ecozone.ro/reviste.php?revista=21&volum=61&numar=191&RID=27311>. [COBISS.SI-ID 512892221], [JCR, SNIP, WoS do 16. 2. 2018: št. citatov (TC): 0, čistih citatov (CI): 0].
2. 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](http://kgk.sze.hu/images/dokumentumok/folyoirat/TGE_V_evf04_ok.pdf). [COBISS.SI-ID 512926781].
3. LISEC, Andrej, ANTIĆ, Slobodan, CAMPUZANO BOLARÍN, Francisco, PEJIĆ, Vaska. An approach to packaging waste reverse logistics : case of Slovenia. Transport, ISSN 1648-3480. [Online ed.], 2017, str. [1-9]. <http://www.tandfonline.com/doi/abs/10.3846/16484142.2017.1326404>, doi:

- 10.3846/16484142.2017.1326404. [COBISS.SI-ID 512892477], [JCR, SNIP, Scopus do 16. 2. 2018: št. citatov (TC): 0, čistih citatov (CI): 0].
4. MURTIČ, Sašo, LISEC, Andrej. Models of inter-organizational logistics management in Slovenia. *Promet*, ISSN 0353-5320. [Print ed.], 2015, vol. 27, no. 1, str. 97-104, ilustr. <http://www.fpz.unizg.hr/traffic/index.php/PROMTT/article/view/1320>, doi: 10.7307/ptt.v27i1.1320. [COBISS.SI-ID 512660541], [JCR, SNIP, WoS do 26. 2. 2017: št. citatov (TC): 1, čistih citatov (CI): 1, Scopus do 28. 1. 2017: št. citatov (TC): 1, čistih citatov (CI): 1].
  5. ANTIC, Slobodan, DJORDJEVIC, Lena, KOSTIĆ, Konstantin, LISEC, Andrej. Dynamic discrete simulation model of an inventory control with or without allowed shortages. *Scientific Bulletin. Series A, Applied mathematics and physics*, ISSN 1223-7027, 2015, vol. 77, iss. 1, str. 163-176, ilustr. [http://scientificbulletin.upb.ro/rev\\_docs\\_arhiva/reza5f\\_351377.pdf](http://scientificbulletin.upb.ro/rev_docs_arhiva/reza5f_351377.pdf). [COBISS.SI-ID 512662589], [JCR, SNIP, WoS do 2. 4. 2018: št. citatov (TC): 2, čistih citatov (CI): 2, Scopus do 17. 11. 2016: št. citatov (TC): 1, čistih citatov (CI): 1].
  6. LEVIČAR, Stanislav, LISEC, Andrej. Postal network reorganization with implementation of information technology. *SDMIMD journal of management*, ISSN 0976-0652, 2014, vol. 5, no. 2, str. 13-22. [COBISS.SI-ID 512642365].
  7. KAVAŠ, Andreja, LISEC, Andrej. Optimized system of returnable packing in Slovenia. *Suvremeni promet*, ISSN 0351-1898, 2014, letn. 34, št. 5/6, str. 355-364, ilustr. [COBISS.SI-ID 512639293].
  8. PRAH, Klemen, LISEC, Andrej, LISEC, Anka. Digital spatial data as support for river basin management : the case of Sotla river basin. *Spatium : urban and spatial planning, architecture, housing, building, geodesia, environment*, ISSN 1450-569X, 2013, iss. 29, str. 59-67, doi: 10.2298/SPAT1329059P. [COBISS.SI-ID 512519485], [SNIP, Scopus do 11. 11. 2013: št. citatov (TC): 0, čistih citatov (CI): 0].
  9. LISEC, Andrej, RUSJAN, Borut. Multi-level postal network for improved efficiency : a case study of Slovenian post. *African journal of business management*, ISSN 1993-8233, 23 Nov. 2011, vol. 5, 29, str. 11676-11685. <http://www.academicjournals.org/ajbm/PDF/pdf2011/23Nov/Lisec%20and%20Rusjan.pdf>, doi: 10.5897/AJBM11.1781. [COBISS.SI-ID 20435430], [WoS do 3. 2. 2012: št. citatov (TC): 0, čistih citatov (CI): 0].
  10. LEVIČAR, Stanislav, LISEC, Andrej. Bioplastic packaging's potential and energy efficiency = Potencial embalaže iz bioplastike in energijska učinkovitost. *Journal of energy technology*, ISSN 1855-5748. [Tiskana izd.], Oct. 2011, vol. 4, iss. 4, str. 25-34. [COBISS.SI-ID 15678005].