UČNI NAČRT PREDMETA/COURSE SYLLABUS	
Predmet:	UVOD V RAZISKOVALNO DELO
Course title:	INTRODUCTION INTO RESEARCH WORK

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
LOGISTIKA SISTEMOV 1. stopnja		3.	5.
LOGISTICS SYSTEMS 1st degree		3.	5.

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

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Laboratory work	Druge oblike študija Field work	Samost. delo Individ. work	ECTS
a-P 2		a-V 40 e-V 2			136	6

Nosilec predmeta / Lecturer:	TOMAŽ KRAMBERGER
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:	Content (Syllabus outline):
Študent se priključi raziskovalnemu delu v enem izmed laboratorijev, ki delujejo na fakulteti. Študenti, pod mentorstvom visokošolskih učiteljev, asistentov ali raziskovalcev v laboratoriju, sodelujejo pri izbranem raziskovalnem projektu. Odvisno od izbrane tematike in metod dela, spoznajo in se naučijo osnov znanstvenega dela: • načrtovanja raziskave, • zbiranja podatkov, • izvajanja analiz in izračunov, • znanstvenega pisanja in poročanja.	A student joins research work in one of the laboratories active at the Faculty. Under the mentorship of higher-education teachers, assistant teachers and researchers in laboratories students participate in a chosen research project. Depending on the chosen topic and method of work, students are acquainted with and learn about the basics of research work: • research planning, • data collection, • performance of analyses and calculations, • academic writing and reporting.

Temeljni literatura in viri / Readings:

- E-gradivo predmeta.
- Research Methodology, An Introduction Wayne Goddard& Stuart Melville.

Osnovna literatura so znanstveni članki in knjige po izboru mentorja./ The main literature are research articles and books selected by the mentor.

Cilji in kompetence:	Objectives and competences:
Cilj predmeta je aplikativna uporaba znanj, ki jih študent pridobi tekom študija, pridobivanje komunikacijskih spretnosti, dela v timu ipd. Študent po zaključku	The goal of the course is applied use of knowledge which a student has gained during his/her studies, gaining communication skills, teamwork, etc. On completion of

predmeta zna izvesti lažjo aplikativno raziskavo in znanstveno predstaviti rezultate.	the course, the student will be able to carry out a simple applied research and to scientifically present the results.

Predvideni študijski rezultati:	Intended learning outcomes:
Znanje in razumevanje: Po zaključku predmeta bo študent sposoben povezati teoretična znanja s področja predmetov študijskega programa in jih uporabiti za izvajanje zastavljenih nalog. Prenesljive/ključne spretnosti in drugi atributi: ▪ Spretnosti komuniciranja: ob komuniciranju z drugimi zaposlenimi podjetja/ustanove. ▪ Uporaba informacijske tehnologije: z uporabo programskih in drugih orodij potrebnih za izvedbo zastavljenih nalog. ▪ Reševanje problemov: z iskanjem rešitev pri zastavljenih nalogah. ▪ Delo v skupini: z delom z drugimi zaposlenimi podjetja/ustanove.	Knowledge and Understanding: On completion of the course the student will be able to integrate theoretical knowledge covered in all the courses of the study programme and use it to perform the given assignments. Transferable/key skills and other attributes: ▪ Communication skills: by communicating with other employees in a company/an organisation. ▪ The use of information technology: by using programmes and other tools necessary for the completion of the given assignment. ▪ Problem solving: by finding solutions to given assignments. ▪ Teamwork: by working with other employees in a company/an organisation.

Metode poučevanja in učenja:	Learning and teaching methods:
Študent mora opraviti določeno število ur praktičnega raziskovalnega dela v laboratoriju na FL. Po opravljenem delu pod nadzorom mentorja pripravi načrt raziskovalnega dela, ki ga predstavi v laboratoriju.	A student must do a certain amount of hours of practical research work in a laboratory at the FL. On completion of work under the supervision of a mentor, a student prepares a plan of research work and presents it in a laboratory.

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
▪ Pripravljen načrt raziskovalnega dela (opravil, neopravil).	▪ 100%	▪ Completed plan of research work (successfully completed, not completed).

Reference nosilca / Lecturer's references:

1. BUTTON, Kenneth John, CHIN, Anthony Thengheng, KRAMBERGER, Tomaž. Incorporating subjective elements into liners' seaport choice assessments. *Transport policy*, ISSN 0967-070X. [Print ed.], 2015, vol. 44, str. 125-133. [COBISS.SI-ID 512686141], [JCR, SNIP, Scopus do 13. 10. 2015: št. citatov (TC): 0, čistih citatov (CI): 0]

2. KRAMBERGER, Tomaž, ŽEROVNIK, Janez. A contribution to environmentally friendly winter road maintenance: : optimizing road de-icing. *Transportation research. Part D, Transport and environment*, ISSN 1361-9209. [Print ed.], July 2008, vol. 13, iss. 5, str. 340-346. http://dx.doi.org/10.1016/j.trd.2008.03.007, doi: 10.1016/j.trd.2008.03.007. [COBISS.SI-ID 512061757], [JCR, SNIP, WoS do 8. 3. 2015: št. citatov (TC): 5, čistih citatov (CI): 4, Scopus do 8. 1. 2015: št. citatov (TC): 5, čistih citatov (CI): 4]

3. BUTTON, Kenneth John, KRAMBERGER, Tomaž, VIZINGER, Tea, INTIHAR, Marko. Economic implications for Adriatic seaport regions of further opening of the Northern Sea Route. *Maritime economics & logistics*, ISSN 1479-294X. [Spletna izd.], ilustr. http://www.palgrave-journals.com/mel/journal/vaop/ncurrent/abs/mel201525a.html, doi: 10.1057/mel.2015.25. [COBISS.SI-ID 512702781], [JCR, SNIP]

4. KRAMBERGER, Tomaž, ŽEROVNIK, Janez, ŠTRUBELJ, Gregor, PRAH, Klemen. GIS technology as an environment for testing an advanced mathematical model for optimization of road maintenance. *Central European Journal of Operations Research*, ISSN 1435-246X, June 2013, vol. 21, issue 1-Supplement, str. 59-73, doi: 10.1007/s10100-012-0265-4. [COBISS.SI-ID 512429885], [JCR, SNIP, WoS do 17. 9. 2013: št. citatov (TC): 1, čistih citatov (CI): 0, Scopus do 3. 7. 2015: št. citatov (TC): 2, čistih citatov (CI): 1]