

**UČNI NAČRT PREDMETA / COURSE SYLLABUS**

**Predmet:** Raziskovalni praktikum  
**Course title:** Research Practice

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Informatika v sodobni družbi, visokošolski strokovni študijski program prve stopnje	-	Tretji	Peti
Informatics, in Contemporary Society the first cycle Professional Programme	-	Third	Fifth

**Vrsta predmeta / Course type**

Obvezni / Obligatory

**Univerzitetna koda predmeta / University course code:**

1-ISD-VS-RP-2023-09-22

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
15	-	30	-	-	135	6

**Nosilec predmeta / Lecturer:** Izr. prof. dr. Katarina Rojko

**Jeziki / Languages:**

**Predavanja / Lectures:** Slovenski / Slovenian, Angleški / English  
**Vaje / Tutorial:** Slovenski / Slovenian, Angleški / English

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

Vpis v 3. letnik študija. Ni posebnih pogojev.

**Prerequisites:**

Third year enrolment. No special requirements.

**Vsebina:**

- Opredelitev raziskovanja.
- Življenjski cikel raziskovanja.
- Izbira raziskovalne teme.
- Identifikacija relevantne literature in virov.
- Priprava pregleda literature.
- Oblikovanje raziskovalnih vprašanj in hipotez.
- Izbira ustrezne raziskovalne metodologije oz. raziskovalne tehnike.
- Analiza in interpretacija raziskovalnih rezultatov.

**Content (Syllabus outline):**

- The nature of research.
- The research life-cycle.
- Selecting a research topic.
- Identification of relevant literature and other sources.
- Writing annotated bibliographies.
- Formulating research questions and hypotheses.
- Selection of an appropriate research methodology or research technique.
- Analysis and interpretation of research results.

- Diskusija in / ali zaključek raziskave.
- Pisanje raziskovalnega predloga in raziskovalne naloge.
- Veščine predstavljanja raziskave.
- Raziskovalna etika.

- Discussion and/or conclusion of research.
- Writing a research proposal and a research paper.
- Research presentation skills.
- Research ethics.

### Temeljni literatura in viri / Readings:

#### Obvezna literatura:

- Murray, R. (2017). *How to Write a Thesis* (4th ed.). London: Open University Press.
- Rojko, K. *Raziskovalni praktikum – gradiva s predavanj*. FIŠ, Moodle.

#### Priporočena literatura:

- Anderson, J. & Poole, M. (2001). *Assignment and Thesis Writing* (4th ed.). Wiley, Milton.
- Blaxter, L., Hughes, C. & Tight, M. (2010). *How to Research* (4th ed.). Maidenhead: Open University Press.

### Cilji in kompetence:

Študentom podati metodološke temelje in različne veščine, potrebne za izvajanje raziskav na področju informacijskih tehnologij.

*Učna enota prispeva k razvoju naslednjih splošnih in predmetno-specifičnih kompetenc:*

- obvladanje raziskovalnih metod, postopkov in procesov
- prizadevanje za kakovost strokovnega dela skozi avtonomnost, (samo)kritičnost, (samo)refleksivnost in (samo)evalviranje v strokovnem delu
- razvoj (samo)kritične presoje
- sposobnost samostojne priprave raziskovalne naloge na ustreznem nivoju

### Objectives and competences:

Provide students with the methodological foundations and a variety of skills required to carry out research in the field of information technologies.

*The instructional unit contributes to the development of the following general and subject-specific competences:*

- competence in research methods, procedures and processes
- striving to achieve quality of professional work through autonomy, (self) criticism, (self) reflexivity and (self) evaluation in professional work
- development of (self)critical judgement
- the ability to independently prepare a research thesis at an appropriate level

**Predvideni študijski rezultati:**

Znanje in razumevanje:

- osnovnih raziskovalnih konceptov
- raziskovalnih metod in tehnik za raziskovanje na področju informacijskih tehnologij
- ključnih raziskovalnih vprašanj na področju informacijskih tehnologij
- kako načrtovati in izvajati raziskovalno delo
- kako pripraviti pregled literature za določeno raziskovalno področje
- kako pisati raziskovalne ideje in predloge
- etičnih raziskovalnih praks

Ključne veščine za:

- izbiro primernih raziskovalnih metod in tehnik za dani raziskovalni problem
- pisanje učinkovitih raziskovalnih predlogov in nalog
- učinkovito predstavljanje raziskovalnih rezultatov
- pisanje raziskovalnih idej in predlogov
- zbiranje, analizo in interpretacijo podatkov

**Intended learning outcomes:**

Knowledge and understanding:

- basic research concepts
- research methods and techniques relevant to information technology research
- key issues in information technology research
- how to design and carry out research work
- how to review the literature on a specific research topic
- how to write research ideas and proposals
- ethical research practices

Key skills to:

- select proper research methods and techniques for given research needs
- write effective research proposals and papers
- make efficient presentations of research results
- write research ideas and proposals
- collect, analyse, and interpret relevant data

**Metode poučevanja in učenja:**

- izbrana predavanja, osredotočena na različne vrste raziskovanja in raziskovalnih metod
- delavnice in vaje z aktivno udeležbo študentov (predstavitve, diskusije, študije primerov, reševanje raziskovalnih problemov)
- konzultacije
- priprava seminarske naloge
- samostojni študij

**Learning and teaching methods:**

- selected lectures focused on different kinds of research and methods suitable for their conduct
- workshops and tutorials with active students' engagement (presentations, discussions, case studies, solving research problems)
- consultations
- seminar work preparation
- *independent study*

Delež (v %) /

Weight (in %)

**Načini ocenjevanja:****Assessment:**

Način (pisni izpit, ustno izpraševanje, naloge, projekt):	Delež (v %) / Weight (in %)	Type (examination, oral, coursework, project):
<ul style="list-style-type: none"> <li>• seminarska naloga in njen zagovor</li> </ul>	100	<ul style="list-style-type: none"> <li>• written seminar work and its defence</li> </ul>

### Reference nosilca / Lecturer's references:

- ROJKO, Katarina, ERMAN, Nuša. The Impact of the Covid-19 Pandemic on Higher Education Students' Perceptions of Educational Applications and Platforms. *International Journal of Cognitive Research in Science, Engineering and Education*. 2023, vol. 11, no. 2, str. 267-279. [COBISS.SI-ID 162876675]
- ROJKO, Katarina, LESJAK, Dušan, ERMAN, Nuša. The COVID-19 Pandemic Crisis : impact on ICT spending. *Journal of computer information systems*. 2022, vol. , iss. , str. 1-16. [COBISS.SI-ID 117632003]
- ROJKO, Katarina, LUŽAR, Borut. Scientific performance across research disciplines : trends and differences in the case of Slovenia. *Journal of informetrics : an international journal*. 2022, vol. 16, iss. 2, str. 1-21. [COBISS.SI-ID 98097923]
- ERMAN, Nuša, ROJKO, Katarina, LESJAK, Dušan. Traditional and new ICT spending and its impact on economy. *Journal of computer information systems*. 2022, vol. 62, iss. 2, str. 384-396. [COBISS.SI-ID 44760067]
- ROJKO, Katarina, ERMAN, Nuša, JELOVAC, Dejan. Impacts of the transformation to industry 4.0 in the manufacturing sector : the case of the U.S. *Organizacija : revija za management, informatiko in kadre*. [Tiskana izd.]. Nov. 2020, vol. 53, no. 4, str. 287-305. [COBISS.SI-ID 41158147]
- ROJKO, Katarina, BRATIĆ, Brankica, LUŽAR, Borut. The Bologna reform's impacts on the scientific publication performance of Ph.D. graduates : the case of Slovenia. *Scientometrics*. 2020, vol. 124, iss. 1, str. 329-356. [COBISS.SI-ID 16975875]