

**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
Računalništvo in spletne tehnologije, visokošolski strokovni študijski program prve stopnje	-	Tretji	Peti
Computer Science and Web Technologies, first cycle Professional Study Programme	-	Third	Fifth

**Vrsta predmeta / Course type**

Obvezni / Obligatory

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

2-RST-VS-RP-2020-05-14

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

**Nosilec predmeta / Lecturer:** prof. dr. Dejan Jelovac

**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:**

Enrolment into the third year of the study. No special requirements.

**Vsebina:**

- Opredelitev raziskovanja.
- Življenjski cikel raziskovanja.
- Izbira raziskovalne teme.
- Oblikovanje raziskovalnih vprašanj.
- Načrtovanje študije.
- Identifikacija relevantne literature in virov.
- Pripravljanje pregleda literature.
- Pisanje raziskovalnih predlogov.
- Pisanje zaključne naloge.
- Pisanje člankov in publikacij.

**Content (Syllabus outline):**

- The nature of research.
- The research life-cycle.
- Selecting a research topic.
- Formulating research questions.
- Study design.
- Identifying relevant literature and other sources.
- Writing annotated bibliographies.
- Writing research proposals.
- Writing a thesis.
- Paper writing and publications.

- Veščine predstavljanja.
- Raziskovalna etika.
- Teme, specifične za posamezna raziskovalna področja, ki si jih izberejo študenti, npr. kvantitativne metodologije, kvalitativne metodologije, izbira pravih orodij, itd.

- Presentation skills.
- Research ethics.
- Topics, specific for students' particular research areas, e.g. quantitative methodologies, qualitative methodologies, choosing the right tools, etc.

### Temeljni literatura in viri / Readings:

#### Obvezna literatura:

- Murray, R. (2017). *How to Write a Thesis* (4th ed.). London: Open University Press.
- Eco, U. (2003). *Kako napišemo diplomsko nalogo*. Ljubljana: Vale-Novak.
- Jelovac, D. *Raziskovalni praktikum – zapiski 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. (2009). *How to Research* (3rd ed.). Maidenhead & NY: Open University Press & McGraw-Hill Education.
- Piantanida, M. & Garman, N. B. (2009). *The Qualitative Dissertation: a guide for students and faculty* (2nd ed.). London: SAGE.
- Nagel, E. (1979). *The Structure of Science: Problems in the Logic of Scientific Explanation* (2nd ed.). Cambridge (MA): Hackett Publishing Company, Inc.
- Popper, K. (2002). *The Logic of Scientific Discovery*. Routledge Clasic.
- Kuhn, T. (2012). *The Structure of Scientific Revolutions*. Chicago: Chicago University Press.

### Cilji in kompetence:

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

#### Splošne kompetence:

- poznavanje in razumevanje procesov, ki jih je mogoče informacijsko podpreti z uporabo spletnih tehnologij, ter sposobnost za njihovo analizo, sintezo in predvidevanje rešitev ter njihovih posledic
- zmožnost skupinskega dela v vseh fazah razvoja spletnih in mobilnih rešitev
- poznavanje pomena kakovosti in prizadevanje za kakovost strokovnega dela skozi avtonomnost, samoiniciativnost, (samo)kritičnost, (samo)refleksivnost in (samo)evalviranje v strokovnem delu
- prepoznavanje in ocenitev aktualnih in nastajajočih tehnologij ter ocenitev

### Objectives and competences:

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

#### General competences:

- familiarity with and understanding of processes allowing information-aided use of web technologies, and the ability to analyse and synthesize them as well as predict solutions and their consequences
- ability to operate within a team during all phases of development of web and mobile solutions
- familiarity with the importance of quality, striving to maintain the quality of professional work through practicing autonomous behaviour, showing initiative, as well as through (self-)criticism, (self-)reflection and (self-)evaluation

njihove uporabnosti za reševanje potreb uporabnikov

- usposobljenost za samoučenje s ciljem obvladovanja najnovejših relevantnih spletnih in mobilnih tehnologij

*Predmetno-specifične kompetence:*

- pisanje in revidiranje osnutkov za doseganje jasno zapisanih besedil
- standardi za urejanje praks za samo-  
evalvacijo in peer-preglede
- oblikovanje uporabnih dokumentov, vključno z grafičnimi elementi
- izdelava povzetkov delov raziskav, ki ustreza področju, občinstvu in namen
- ustno komuniciranje glede raziskave  
diplomske naloge

- identification and evaluation of current and emerging technologies, and assessment of their usability in terms of fulfilling user requirements
- ability to self-educate with the aim to master relevant state-of-the-art web and mobile technologies

*Subject-specific competences:*

- write and revise drafts to achieve clear and direct text style, and employ
- standard editing practices for self- and peer-reviews
- design usable documents, including graphic elements
- produce a summarized version of thesis research appropriate to field, audience and purpose
- communicate thesis research in an oral presentation

#### **Predvideni študijski rezultati:**

*Po zaključenem predmetu ima student/šudentka:*

*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 raziskovalne literature za določeno raziskovalno področje
- kako vrednotiti 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 člankov
- učinkovito predstavljanje raziskovalnih rezultatov
- vrednotenje raziskovalnih idej in predlogov

#### **Intended learning outcomes:**

*After completing this subject, students should have:*

*Knowledge and understanding of:*

- 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 research literature on a specific research topic
- how to evaluate research ideas and proposals
- ethical research practices

*Key skills to:*

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

- zbiranje, analizo in interpretacijo podatkov

#### Metode poučevanja in učenja:

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

#### Learning and teaching methods:

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

#### Načini ocenjevanja:

Delež (v %) /

Weight (in %) **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, JELOVAC, Dejan. Challenges due to excessive amount of online data and (mis)information. V: STRAHONJA, Vjeran (ur.), KIRINIĆ, Valentina (ur.). *CECIIS : Central European Conference on Information and Intelligent Systems : 29th international conference, September 19th-21st, 2018, Varaždin, Croatia*, (Central European Conference on Information and Intelligent Systems (Print), ISSN 1847-2001), (Central European Conference on Information and Intelligent Systems (Online), ISSN 1848-2295). Varaždin: Faculty of Organization and Informatics. 2018, str. 33-38, graf. prikazi. [COBISS.SI-ID 2048535571].
- ROJKO, Katarina, JELOVAC, Dejan. Human role in factories of the future. V: *Zbornik radova, Prva međunarodna naučna konferencija o digitalnoj ekonomiji DIEC 2018*, Visoka škola "Internacionalna poslovno-informaciona akademija" Tuzla, maj 2018. Tuzla: Off-set d.o.o. 2018, str. 165-178, ilustr. [COBISS.SI-ID 2048522259].
- JELOVAC, Dejan, ORLIĆ, Ranko, SUKLAN, Jana, SRŠEN, Cvetko. Organisational culture measurement : an empirical study of local and regional similarities and differences in case of Post of Slovenia ltd. *Innovative issues and approaches in social sciences*, ISSN 1855-0541, 2016, vol. 9, no. 2, str. 8-34
- GRUŠOVNIK, Rosana, JELOVAC, Dejan. The Impact of managerial multicultural competences on company's competitive advantage in global economy. *Innovative issues and approaches in social sciences*, ISSN 1855-0541, 2014, vol. 7, no. 3, str. 58-89.
- JELOVAC, Dejan. The impact of corporate social responsibility in the context of small and medium enterprise. *Innovative issues and approaches in social sciences*, ISSN 1855-0541, May 2012, vol. 5, no. 2, 21-35.
- JELOVAC, Dejan, MAŠKE, Matjaž. An empirical study of transformational leadership in Slovenian entrepreneurship. *Innovative issues and approaches in social sciences*, ISSN 1855-0541, 2012, vol. 5, no. 3, str. 65-82
- JELOVAC, Dejan, WAL, Zeger van der, JELOVAC, Ana. Business and government ethics in the new and old EU: an empirical account of public-private value congruence in

Slovenia and the Netherlands. *Journal of Business Ethics*, ISSN 0167-4544, 2011, vol. 103, no. 1, str. 127-141.

- JELOVAC, Dejan, REK, Mateja. *Komuniciranje v medkulturnem okolju*. Ljubljana: Vega, 2010. 183 str., ilustr. ISBN 978-961-92951-2-0.
- JELOVAC, Dejan. The historical-cultural background of public administration values : the case of Slovenia = Zgodovinsko-kulturno ozadje vrednot v javni upravi : primer Slovenija. *Raziskave in razprave*, ISSN 1855-6280, 2010, letn. 3, št. 3, str. 75-101.
- ADAM, Frane, JELOVAC, Dejan, REK, Mateja. Economic cultural (in)compatibility: old and new EU members in comparison. V: *PODMENIK*, Darka (ur.). *Sociokulturni in organizacijski vidiki prenosa znanja*. Ljubljana: Inštitut za razvojne in strateške analize, 2008, str. [107]-134.