

	UČNI NAČRT PREDMETA/COURSE SYLLABUS
Predmet	Objektni in strukturni razvoj informacijskih sistemov
Course title	Objective and Structural Development of Information Systems

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Poslovna informatika 1	Poslovna informatika	3.	5.
Business Informatics 1	Business Informatics	3 rd	5 th

Vrsta predmeta/Course type modularni/module

Univerzitetna koda predmeta/University course code

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
30			30		90	6

Nosilec predmeta/Lecturer:

Jeziki/ Languages: **Predavanja/Lectures:** slovenski/Slovenian

Vaje/Tutorial: slovenski/Slovenian

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

<ul style="list-style-type: none"> • Pogoj za vključitev v delo je vpis v 3. letnik študija. • Študent mora pred pristopom k izpitu pripraviti in predstaviti seminarsko nalogo. 	<ul style="list-style-type: none"> • The prerequisite for participation is enrolment in the third year of study. • Students have to successfully prepare and present a seminar paper before the examination.
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Vsebina:

Content (Syllabus outline):

<ul style="list-style-type: none"> • <i>Podroben pregled ključnih razlik med strukturnim in objektnim pristopom k razvoju IS.</i> • <i>Podrobna predstavitev primera procesa strukturnega razvoja.</i> • <i>Podrobna predstavitev ključnih strukturnih tehnik na podlagi primerov.</i> • <i>Pregled pomembnejših izdelkov in primeri izdelkov strukturnega razvoja.</i> • <i>Podrobna predstavitev primera procesa objektnega razvoja.</i> • <i>Pregled pomembnejših izdelkov in primeri izdelkov objektnega razvoja.</i> • <i>Pregled agilnih pristopov k razvoju IS.</i> • <i>Osnove modelno vodenega razvoja.</i> • <i>Izvedba konkretnega primera projekta z uporabo formalnega pristopa.</i> 	<ul style="list-style-type: none"> • <i>Detailed review of key differences between the structural and objective approach to the development of information systems.</i> • <i>Detailed presentation of an example of the process of structural development.</i> • <i>Detailed presentation of the key structural techniques based on examples.</i> • <i>Review of important products and examples of products of structural development.</i> • <i>Detailed presentation of an example of the process of objective development.</i> • <i>Review of important products and examples of products of objective development.</i> • <i>Review of agile approaches to the</i>
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	<p><i>development of information systems.</i></p> <ul style="list-style-type: none"> • <i>Basics of model-directed development.</i> • <i>Implementation of a concrete example/project using the formal approach.</i>
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Temeljna literatura in viri/Readings:

Avison, D. in Fitzgerald, G. (1998). Information Systems Development. McGraw-Hill Companies; 2nd edition (February 4, 1998).

Booch, G. in sod. (1999). The Unified Software Development Process. Addison Wesley Longman, Inc.

EMRIS – Enotna metodologija razvoja informacijskih sistemov, FRI, 2004.

Eriksson, H.-E. in sod. (2003). UML 2 Toolkit. New York. Wiley; Bk&CD-Rom edition (October 13, 2003).

Hoffer, J. A. in sod. (1999). Modern Systems Analysis and Design, (second edition). London: Prentice Hall, 4 edition (May 17, 2004).

Pender, T. A. (2002). UML Weekend Crash Course. New York: Wiley Publishing.

Cilji in kompetence:

Učna enota prispeva predvsem k razvoju naslednjih splošnih in specifičnih kompetenc:

- avtonomnost, (samo)kritičnost, (samo)refleksivnost, samoocenjevanje in prizadevanje za kakovost;
- usposobljenost za raziskovanje na področju informatike v upravljanju in poslovanju ter razvoj kritične in samokritične presoje;
- usposobljenost za načrtovanje sistemov;
- sposobnost za skupinsko projektno delo na področju informatike;
- poznavanje in razumevanje procesa razvoja programske opreme;
- razumevanje metodologij razvoja IS;
- sposobnost uporabe formalnih postopkov pri razvoju IS;
- razumevanje diagramskih tehnik;
- razvoj veščin in spretnosti pri uporabi metodologij za razvoj IS.

Objectives and competences:

The learning unit mainly contributes to the development of the following general and specific competences:

- autonomy, (self-)criticism, (self-)reflection, self-evaluation and efforts towards quality;
- the ability to carry out research in the field of informatics and business and the development of critical and self-critical assessment;
- the ability for system planning;
- the ability to work in a project team in the field of informatics;
- knowledge and understanding of the process of software development;
- understanding of methodologies of the development of information systems;
- the ability to use formal procedures in the development of information systems;
- understanding of diagram techniques;
- development of skills and abilities in the use of methodologies for the development of information systems.

Predvideni študijski rezultati:

Znanje in razumevanje:
Študent/Študentka:

- razume razlike med strukturnim in objektnim pristopom k razvoju IS;
- podrobno razume ključne strukturne tehnike razvoja IS;

Intended learning outcomes:

Knowledge and understanding:
Students:

- understand the difference between the structural and objective approach to the development of information systems;
- understand in detail the key structural

<ul style="list-style-type: none"> • podrobno razume ključne objektne tehnike razvoja IS; • pozna pomembnejše izdelke strukturnega razvoja; • pozna pomembnejše izdelke objektnega razvoja; • je sposoben/sposobna izdelati analizo, načrt ter izpeljati razvoj enostavnega; informacijskega sistema. 	<p>techniques of the development of information systems;</p> <ul style="list-style-type: none"> • understand in detail the key objective techniques of the development of information systems; • know the most important products of structural development; • know the most important products of objective development; • are able to prepare an analysis, plan and develop a simple information system.
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Metode poučevanja in učenja:

Learning and teaching methods:

<ul style="list-style-type: none"> • <i>predavanja</i> z aktivno udeležbo študentov; • <i>seminarska naloga</i> v povezavi s prakso; • <i>laboratorijske vaje</i> z uporabo računalniških orodij; • <i>samostojni študij</i>. 	<ul style="list-style-type: none"> • <i>lectures</i> with active participation of students; • <i>seminar paper</i> in connection with practice; • <i>laboratory work</i> using computer tools; • <i>independent study</i>.
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Delež (v %)

Weight (in %)

Načini ocenjevanja:

Assessment:

<p>Način (pisni izpit, ustno spraševanje, naloge, projekt):</p> <ul style="list-style-type: none"> • pisni (ustni) izpit • seminarska naloga s predstavitevijo in zagovorom 	<p>60</p> <p>40</p>	<p>Types (written examination, oral examination, coursework, project):</p> <ul style="list-style-type: none"> • written (oral) exam • seminar paper presentation and defence
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