UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Predmet:	Spletno programiranje
Course title:	Web Programming

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Informatika v sodobni družbi, visokošolski strokovni in univerzitetni študijski program prve stopnje	-	Drugi	Četrti
Informatics in Contemporary Society, first cycle Professional Study Programme and Academic Study programme	-	Second	Fourth

Vrsta predmeta / Course type | Obvezni / Obligatory

Univerzitetna koda predmeta / University course code: | 1-ISD-VS,UN-SP-2016-10-01

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
30	-	-	-	45	105	6

Nosilec predmeta / Lecturer:

Jeziki / **Languages:**	**Predavanja /** **Lectures:**	Slovenski, angleški / Slovene, English
	Vaje / Tutorial:	Slovenski, angleški / Slovene, English

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisits:**
Pogoj za vključitev v delo je vpis v 2. letnik študija. Pogoj za opravljanje študijskih obveznosti je izdelana seminarska naloga.	The condition for attendance is enrolment in the 2nd year of studies. The exam condition is a finished seminar paper.

Vsebina:

- Sodobne spletne tehnologije. Osnove spletnega okolja.
- Elementi spletne strani. Jezik HTML. Oznake HTML. Formularji in dogodki.
- Osnove slogovnih predlog CSS.
- Jezik XML.
- Osnove DTD. Validacija XML in XHTML.
- Spletno programiranje pri klientu. Jezik JavaScript in objektni model DOM.

Content (Syllabus outline):

- Contemporary web technologies. Fundamentals of a web environment.
- Web page elements. The HTML language. HTML tags. Forms and events.
- Cascading style sheet (CSS) fundamentals.
- The XML language.
- DTD fundamentals. Validation of XML and XHTML.

• Spletno programiranje na strețniku. Jezik PHP. • Osnove relacijskih podatkovnih baz. • Poizvedovalni jezik SQL. Uporaba podatkovnih baz v spletnih aplikacijah. • Spletna ogrodja. Primer ogrodja (Django).	• Client based web. programming. JavaScript programming language and the DOM object model. • Server based web programming. The PHP language. • Relational database fundamentals. • The SQL query language. Use of databases in web applications. • Web frameworks. Web application development examples (Django).

Temeljni literatura in viri / Readings:

- Oliver, D., Morrison, M. (2006): HTML and CSS in 24 hours. Indianapolis: Sams.
- Young, M.J. (2002): XML: step by step, 2nd Edition. Redmond: Microsoft Press.
- Disbrow, S.W. (2001): JavaScript Weekend Crash Course. Hungry Minds.
- Goodman, D., Morrison, M. (2004): JavaScript Bible, 5th Edition. Indianapolis : Wiley Publishing.
- Hribar, P. (1998): Spoznajmo JavaScript: programiranje spletnih strani. Nova Gorica: Flamingo.
- Štrancar, M., Klemen, S. (2005): PHP in MySQL na spletnem strețniku Apache, druga izdaja. Zaloțba Pasadena.
- Welling, L., Thomson, L. (2008): PHP and MySQL Web Development. Addison-Wesley Professional.

Cilji in kompetence:	**Objectives and competences:**
Učna enota prispeva k razvoju naslednjih splošnih in predmetno specifičnih kompetenc: • sposobnost povezovanja koherentno obvladanega temeljnega znanja, pridobljenega pri obveznih predmetih, ter njegova uporaba v praksi • zmožnost zapisati problem v obliki algoritma in pretvorba algoritma v računalniški program z uporabo sodobnih programskih orodij • razumevanje računalniških sistemov in arhitektur	*The instructional unit contributes to the development of the following general and subject-specific competences:* • the ability to interconnect and apply the coherently absorbed fundamental knowledge from the compulsory courses • the ability to describe a problem in algorithm form and convert the algorithm into a computer programme using contemporary programming tools • comprehension of computer systems and architectures

Predvideni študijski rezultati:	**Intended learning outcomes:**
Znanje in razumevanje: *Študent/študentka:* • razvije logično razmišljanje in sposobnosti načrtovanja programov • razume pomen načrtovanja in testiranja programske opreme • zmore dekompozicijo večjega problema na več manjših in obvladljivih	Knowledge and understanding: *Student:* • develops logical thinking and software design abilities • understands the importance of design and testing of software • is able to decompose a large problem into several smaller, controllable problems

- razume, kako deluje internet - operativno pozna programske jezike za spletno programiranje - spozna razmerja oblika-funkcija - je sposoben izdelati dinamično spletno stran	- understands the basic internet technologies - has operative knowledge of web programming languages - learns about the form-function relationship - is able to produce a dynamic web page

Metode poučevanja in učenja: **Learning and teaching methods:**

predavanja z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov) *vaje,* kjer bodo študentje na konkretnih problemih ponovili, utrdili in dodatno osvetlili pojme in metode, spoznane na predavanjih *seminarske naloge:* z njimi bodo študentje stimulirani, da sami preizkusijo snov, ki bo obravnavana na predavanjih in vajah	*lectures* with active participation of students (explanations, questions, cases, problem solving) *lab work:* where students will use practical cases to refresh, reinforce and gain addition insight into the ideas and methods they've encountered at lectures *seminar papers:* will stimulate the students to apply and test the knowledge gained at lectures and lab work

	Delež (v %) /	
Načini ocenjevanja:	Weight (in %)	**Assessment:**
Način (pisni izpit, ustno izpraševanje, naloge, projekt): - pisni/ustni izpit - domače naloge - seminarska naloga Študent lahko pristopi k pisnemu izpitu po opravljenih domačih nalogah in seminarski nalogi, pri katerih mora doseči vsaj 50% uspešnost.	50 30 20	Type (examination, oral, coursework, project): - written/oral exam - homeworks - seminar paper Student can take part in the written exam, after he/she completes his/her homeworks and the seminar paper with at least 50% success.