

Study programmes: PhD studies - Informatics				
Course name: R478 - Semantic Web				
Lecturers: Dušan Tošić and other lecturers of the Department for Computer Science				
Status: Optional				
ECTS: 9				
Attendance prerequisites: P491				
Course aims: Acquiring knowledge for doing research in the semantic web field, especially in subfields of intelligent data organization, information retrieval and data visualizations.				
Course outcome: After the course, students are prepared for doing research in semantic web.				
Course content: Data representations (XML, RDF, RDFS); query languages, knowledge representation (ontologies, agents, rules and reasoning); languages for presenting ontologies (OWL); editors for ontologies; concepts and graphs. Advanced searching machines (case study - Serbian); meta-data (dictionaries), visualizations - user interface, implementation of visual languages, intelligent information representations. Natural languages and ontologies. Web communication by natural languages.				
Literature:				
1. Michael C. Daconta, Leo J. Obrst, Kevin T. Smith, The Semantic Web: A guide to the future of XML, Web Services and Knowledge Management, Wiley, 2003				
2. Dean Allemang, James Hendler, Semantic Web for the Working Ontologist: Modeling in RDF, RDFS and OWL				
3. V. Devedzic, "Semantic Web and Education", Monograph, Springer, Berlin Heidelberg New York, 2006 (the lecturer can choose another appropriate literature)				
Number of hours: 10	Lectures: 4	Tutorials: -	Laboratory: -	Research: 6
Teaching and learning methods: Frontal/Individual/Group work/Practical work.				
Assessment (maximal 100 points)				
Course assignments	points	Final exam		points
Lectures	-	Written exam		%ispit_pis meni%
Exercises / Tutorials	-	Oral exam		-
Colloquia	-	Written-oral exam		50
Essay / Project	50			