

Study program: Informatics			
Course title: Expert Systems			
Professor/assistant: Ivan D. Petrović			
Type of course: Elective			
ECTS credits: 6			
Prerequisites: none			
Aims of the course: Detailed approach to concepts, methods and techniques of Expert systems. Acquiring theoretical knowledge and practical skills in development and use of expert systems, as well as developing a critical view on the limits of practical application of expert systems.			
Learning outcomes: Student will be able to, with the use of some of the tools for developing expert systems, create a specific expert system for solving problems from different areas.			
Syllabus:			
<i>Theoretical part:</i>			
Expert systems. Concept, importance, history. Application of expert systems (decision making, management, diagnostics). Knowledge. Presentation of knowledge. Production rules. Conclusion. Various tools, ESBT (expert system building tools).			
<i>Practical part:</i>			
Practical training: (using some of the tools for creating expert systems – Jess, Clips).			
Literature:			
1. Veštačka inteligencija, Savremeni pristup, Knjiga 1 i 2, Pevod trećeg izdanja, Stuart Russel and Peter Norvig, Računarski fakultet Beograd, ISBN: 978-86-7991-297-8, 2011.			
2. Ekspertni sistemi, Jaroslav E. Polišćuk, ETF Podgorica, 2004.			
3. Sofverski alati i okviri otvorenog koda namenjeni razvoju ekspertnih sistema; alati i prateća dokumentacija i tutorijali su besplatno raspoloživi na Vebu.			
Total number of active classes: 75		Lectures: 30	Practical classes: 45
Teaching methods: Lectures and practical training.			
Grading system (maximum 100 points)			
grading scale from 5 to 10: below 51 points – student fails the exam, grade 6 from 51- 60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91- 100 points.			
Pre-exam obligations:	Points:	Final exam:	Points:
Activity during lectures	max 5	Written exam	50
Practical training	max 5		
Written test(s)	max 25		
Term papers	max 15		
Minimum requirement for the final exam	30		