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|--|----------------|---------------------|------------------------------|
| <b>Study program:</b> Informatics  |                |                     |                              |
| <b>Course title:</b> Artificial Intelligence   |                |                     |                              |
| <b>Professor/assistant:</b> Violeta M. Petrović  |                |                     |                              |
| <b>Type of course:</b> elective  |                |                     |                              |
| <b>ECTS credits:</b> 6   |                |                     |                              |
| <b>Prerequisites:</b> none   |                |                     |                              |
| <b>Aims of the course:</b><br>Students are introduced to basic concepts and domains of artificial intelligence. Students become familiar with contemporary systems of artificial intelligence and possibilities offered by modern information technologies.  |                |                     |                              |
| <b>Learning outcomes:</b><br>The student is able to understand basic problems, possible solutions and research directions of the artificial intelligence.  |                |                     |                              |
| <b>Syllabus:</b><br><i>Theoretical part:</i><br>Artificial intelligence, definition, term, history, relation between artificial/natural intelligence, newest results. Turing's test.<br>Domains of artificial intelligence – systems based on knowledge (expert systems), robotics, understanding natural languages, neural networks, theories of game, automatic programming, mechanical learning.<br>Solving problems. State space search. |                |                     |                              |
| <b>Literature:</b><br>1. Veštačka inteligencija, Savremeni pristup, Knjiga 1 i 2, Prevod trećeg izdanja, Stuart Russel and Peter Norvig, Računarski fakultet Beograd, 2011.  |                |                     |                              |
| <b>Total number of active classes: 75</b>  |                | <b>Lectures: 45</b> | <b>Practical classes: 30</b> |
| <b>Teaching methods:</b> Lectures and practical classes.   |                |                     |                              |
| <b>Grading system</b> (maximum 100 points)<br>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.   |                |                     |                              |
| <b>Pre-exam obligations:</b>   | <b>Points:</b> | <b>Final exam:</b>  | <b>Points:</b>               |
| Activity during theoretical lectures   | max 5          | Oral exam           | 50                           |
| Practical training   | max 5          |                     |                              |
| Written test(s)  | max 20         |                     |                              |
| Term paper(s)  | max 20         |                     |                              |
| Minimum requirement for the final exam   | 30             |                     |                              |