

<b>Course title:</b> Artificial intelligence (code ID109)		
<b>Lecturer(s):</b> Miloš A. Racković, Miloš M. Radovanović, Vladimir M. Kurbalija		
<b>Status:</b> elective		
<b>ECTS:</b> 7		
<b>Requirements:</b> none		
<b>Learning objectives</b> Enabling students to apply advanced concepts of artificial intelligence in solving various problems in the field of computer science.		
<b>Learning outcome</b> <i>Minimal:</i> At the end of the course it is expected from a successful student to create an application based on an appropriate concept of artificial intelligence, and use it on an illustrative example. <i>Desirable:</i> At the end of the course it is expected from a successful student to demonstrate thorough understanding of the principles of functioning of selected advanced concepts of artificial intelligence, through implementation of an appropriate problem.		
<b>Syllabus</b> <i>Theory</i> Intelligent agents. Knowledge and reasoning. Reasoning based on uncertain knowledge and incomplete information. Using knowledge in learning. Communication as an aspect of artificial intelligence. Agents that communicate. Intelligent systems. Elements of robotics. <i>Practice</i> ---		
<b>Recommended literature</b> Stuart J. Russell, Peter Norvig, <i>Artificial Intelligence, A Modern Approach</i> , Third Edition, Prentice Hall, 2010		
<b>Weekly teaching load</b>	Lectures: 3	Student research: 0
<b>Teaching methodology</b> Lectures will be held in blocks of through consultations. Students are predominantly instructed to individually study appropriate literature. Advanced concepts of application of artificial intelligence algorithms are studied in solutions of appropriate problems. Students are given the option to select an area of artificial intelligence and through preparation of a seminar paper demonstrate the implementation of an algorithm that solves an illustrative problem using an appropriate concept of artificial intelligence. The defense of the seminar paper is conducted prior to the oral exam. At the oral exam the student demonstrated deeper understanding of the principles of functioning of the implemented concept of artificial intelligence by answering questions.		
<b>Grading method (maximal number of points 100)</b> Seminar paper: 60 points. Oral exam: 40 points.		