

<b>Study programme(s):</b> Information Technology				
<b>Level:</b> Master of Science				
<b>Course title:</b> History of informatics				
<b>Lecturer:</b> Miloš Savić				
<b>Status:</b> elective				
<b>ECTS:</b> 4				
<b>Requirements:</b> none				
<b>Learning objectives</b> The aim of the course is to introduce students to the historical development of informatics as a scientific discipline and key scientists from the field, as well as to key technological innovations and the historical development of hardware and software.				
<b>Learning outcomes</b> <i>Minimum:</i> It is expected from a successful student to demonstrate understanding of key factors in the evolution of informatics and computer science, as well as to be able to explain and illustrate key ideas in the development of informatics in their historical context. <i>Desirable:</i> It is expected that a successful student understands causal relationships between various factors in the evolution of informatics and computer science, as well as to be able to explain theoretical concepts and technological innovations through their genesis and impact to the further development of informatics.				
<b>Syllabus</b> <i>Theoretical instruction</i> The genesis and periodization of informatics. The first calculation tools. Mechanical calculators. The development of theoretical foundations of informatics in the 19 <sup>th</sup> and 20 <sup>th</sup> century. Analog and digital computers up to the first half of the 20 <sup>th</sup> century. The history of digital electronic computers and key technological innovations. The birth and development of personal computers. Various hardware components and their development. The history of programming – programming languages, techniques and methodologies. The history of operating systems and system software. The history of applicative software and user interfaces. Software crisis and the historical development of software engineering. The history of Internet and Internet services. The history of databases. The history of artificial intelligence. The history of free software. The most influential persons and companies in the evolution of informatics and computer science. The history of informatics in Serbia. <i>Practical instruction</i> Writing seminar papers on chosen topics in the history of informatics.				
<b>Literature</b> <i>Recommended</i> 1. Paul E. Ceruzzi, <i>A History of Modern Computing</i> , Second Edition, MIT Press, 2003. 2. Gerard O'Regan, <i>Introduction to the History of Computing: A Computing History Primer</i> , Springer, 2016. 3. Selected articles from the journal <i>IEEE Annals of the History of Computing</i>				
<b>Weekly teaching load</b>				
Lectures: 2	Exercises: -	Practical Exercises: -	Student research:	Other:
<b>Teaching methodology</b> Theoretical classes are based on the classical teaching model involving a projector to present teaching materials. Key facts regarding the historical development of theoretical foundations of informatics, hardware, software and main computer science disciplines are presented to students chronologically. Most important principles of informatics emerged during time are explained and illustrated with characteristic examples. Obstacles computer scientists faced in the past and revolutionary ideas in informatics are analyzed and discussed with students. To approach the final exam, a student has to write a seminar paper on a chosen topic in the history of informatics. At the oral exam students are expected to demonstrate the in-depth understanding of the topics covered by the course.				
<b>Grading method (maximal number of points 100)</b>				
<b>Pre-exam obligations</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>	
Seminar paper	50	Oral examination	50	