

Study Programme: Information Technologies		
Course Unit Title: History of Informatics		
Course Unit Code: IT710		
Name of Lecturer(s): Miloš Savić		
Type and Level of Studies: Master Academic Degree		
Course Status (compulsory/elective): Elective		
Semester (winter/summer): Winter		
Language of instruction: Serbian (primary), English (secondary)		
Mode of course unit delivery (face-to-face/distance learning): Face-to-face		
Number of ECTS Allocated: 4		
Prerequisites: None		
Course Aims: 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.		
Learning Outcomes: <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.		
Syllabus: <i>Theory</i> The genesis and periodization of informatics. The first calculation tools. Mechanical calculators. The development of theoretical foundations of informatics in the 19 th and 20 th century. Analog and digital computers up to the first half of the 20 th 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>Practice</i> Writing seminar papers on chosen topics in the history of informatics.		
Required Reading: 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>		
Weekly Contact Hours: 2	Lectures: 2	Practical work: 0
Teaching Methods:		

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.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Seminar paper	50	Oral exam	50

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.