SYLLABUS

1. Information regarding the programme

1.1 Higher education institution	Babeş-Bolyai University
1.2 Faculty	Faculty of Mathematics and Computer Science
1.3 Department	Department of Computer Science
1.4 Field of study	Computer Science
1.5 Study cycle	Bachelor
1.6 Study programme / Qualification	Computer Science

2. Information regarding the discipline

2.1 Name of the discipline	History of Computer Science					
2.2 Course coordinator		Lect. PhD. Sterca Adrian				
2.3 Seminar coordinator		Lect. PhD. Sterca Adrian				
2.4. Year of study	**3**	2.5 Semester	**6**	2.6. Type of evaluation	**C**	2.7 Type of discipline	**Optional**

3. Total estimated time (hours/semester of didactic activities)

3.1 Hours per week	2	Of which: 3.2 course	2	3.3 seminar/laboratory	0
3.4 Total hours in the curriculum	24	Of which: 3.5 course	24	3.6 seminar/laboratory	0

Time allotment:	hours
Learning using manual, course support, bibliography, course notes	16
Additional documentation (in libraries, on electronic platforms, field documentation)	30
Preparation for seminars/labs, homework, papers, portfolios and essays	0
Tutorship	10
Evaluations	20
Other activities:	0

3.7 Total individual study hours	76
3.8 Total hours per semester	100
3.9 Number of ECTS credits	4

4. Prerequisites (if necessary)

4.1. curriculum	●
4.2. competencies	●

5. Conditions (if necessary)

5.1. for the course	● Class room with a video projector device
5.2. for the seminar /lab activities	●

6. Specific competencies acquired

Professional competencies	▪
Transversal competencies	▪ Applying rules for an organized and efficient work, responsible attitude towards the didactic-scientific field for creative valorification of one's own potential, complying to the principles and professional ethics norms ▪ Utilizing efficient methods and techniques for learning, knowing, research and development of knowledge valorification capacities, adapting to the requirements of a dynamic society and the communication in Romanian or an international language

7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	• To obtain a global view of Computer Science and to understand and know its evolution.
7.2 Specific objective of the discipline	• To get students accustomed with historical evolution of the main Computing Systems and Operating Systems types existent in today Computer Science and in perspective. • To discover the most important people in Computer Science.

8. Content

8.1 Course	Teaching methods	Remarks
1. Algorithmics in ancient times and Middle Age; Euclid's algorithm. First Computing Systems and first programming elements: Blaise Pascal, Charles Babage and Ada Byron, forerunners of classical Computer Science.	Exposure:description, explanation,examples	The course is structured as 2 hours classes, one course every two weeks
2. Mathematical models in Computer Science: the Turing machine, normal algorithms and formal languages. The emergence of the electronic computer(1943-45); John von Neumann's and Alan Turing's contributions.	Exposure:description, explanation,examples	
3. Crucial moments in hardware development: the input-output channel, the transistor, VLSI circuits, multiprocessor systems, real time systems, microcomputers and supercomputers.	Exposure:description, explanation,examples	
4. Operating systems, from resident monitors to distributed operating systems; from the monolithic internal structure to stratified structures and microkernel.	Exposure:description, explanation,examples	
5. Computer generations. Short history of programming languages.	Exposure:description, explanation,examples	
6.History of computer communication and the Internet.	Exposure:description, explanation,examples	
7. Important figures in Computer Science	Exposure:description,	

	explanation,examples	
8. History of the open source movement vs. closed source	Exposure:description, explanation,examples	
9. History of the WWW	Exposure:description, explanation,examples	
10. History of mobile devices	Exposure:description, explanation,examples	
11. History of Computer Science in Romania	Exposure:description, explanation,examples	
12. Old computer exposition	Exposure	

Bibliography
1. http://cs-exhibitions.uni-klu.ac.at/index.php?id=320
2. http://cs-exhibitions.uni-klu.ac.at/index.php?id=321
3. http://cs-exhibitions.uni-klu.ac.at/index.php?id=323
4. Estabrook N. Teach Yourself the Internet in 24 Hours. E-book Mc Millan Computer programming: http://www.mcp.com
5. * *UNIX Unleashed. E-book Mc Millan Computer programming: http://www.mcp.com
6. History of Unix. http://perso.club-internet.fr/unix/history.html
7. http://www.wikipedia.org
8. http://www.cs.uwaterloo.ca/~shallit/Courses/134/history.html
9. http://www.computerhistory.org/

8.2 Seminar / laboratory	Teaching methods	Remarks

Bibliography

9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

- The course respects the IEEE and ACM Curriculla Recommendations for Computer Science studies;
- The course gives a global view on many fields in Computer Science so it provides the student a more general expertise in Computer Science;

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the grade (%)
10.4 Course	Knowing the milestones in the evolution of Computer Science.	Students must write a report	100 %
10.5 Seminar/lab activities			
10.6 Minimum performance standards			
In order to successfully pass this class, students must get at least 5.			

Date	Signature of course coordinator	Signature of seminar coordinator
....	Lect.PhD. Adrian Sterca	Lect.PhD. Adrian Sterca

Date of approval

Signature of the head of department

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Prof. PhD. Anca Andreica