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	**E**	2.7 Type of discipline	**Optional**

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

3.1 Hours per week		1	Of which: 3.2 course	1	3.3 seminar/laboratory	0
3.4 Total hours in the curriculum		12	Of which: 3.5 course	12	3.6 seminar/laboratory	0
Time allotment:						hours
Learning using manual, course support, bibliography, course notes						23
Additional documentation (in libraries, on electronic platforms, field documentation)						20
Preparation for seminars/labs, homework, papers, portfolios and essays						0
Tutorship						5
Evaluations						15
Other activities:						0

3.7 Total individual study hours	63
3.8 Total hours per semester	75
3.9 Number of ECTS credits	3

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	▪ Knowledge, understanding and use of basic concepts of theoretical Computer Science
Transversal competencies	▪ Knowing the milestones in the history of computers and of computer science and knowing the most important people in computer science ▪ Being able to view Computer Science as a whole and to see the interconnections among various fields in Computer Science; Being able to give lectures on the evolution of Computer Science

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	
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.	Examination	100 %
10.5 Seminar/lab activities			
10.6 Minimum performance standards			
In order to successfully pass this class, students must get at least 5 at the written exam.			

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
....	Prof. PhD. Bazil Parv