



MINISTERUL EDUCAȚIEI
UNIVERSITATEA „AUREL VLAICU” DIN ARAD
310130 Arad, B-dul Revoluției nr. 77, P.O. BOX 2/158 AR
Tel : 0040-257- 283010; fax. 0040-257- 280070
<http://www.uav.ro>; e-mail: rectorat@uav.ro
Operator de date cu caracter personal nr.2929

SYLLABUS

1. Study programme

1.1. Higher education institution	„Aurel Vlaicu” University of Arad
1.2. Faculty	of Exact Sciences
1.3. Department	Department of Mathematics and Computer Science
1.4. Field of study	Mathematics
1.5. Study level	2024-2025
1.6. Ciclul de studii	Bachelor
1.7. Study programme / Qualification	Mathematics-Informatics
1.8. Form of education	Full – Time study

2. Course details

2.1. Name of the course	History of Computer Science
2.2. Course coordinator	Prof. Adrian Palcu
2.3. Seminar/laboratory/project coordinator	Prof. Adrian Palcu
2.4. Study year	2
2.5. Semester	1
2.6. Evaluation type	ES
2.7. Course type	As

3. Estimated total time (hours per semester)

3.1. Hours per week	2
3.2. Lecture hours per week	1
3.3. Seminar/laboratory/project hours per week	1
3.4. Total hours per curriculum	28
3.5. Lecture hours per semester	14
3.6. Seminar/laboratory/project hours per semester	14
Time division [hrs]	
3.4.1. Independent study from textbooks, course support, bibliography and notes	10
3.4.2. Additional reading (libraries, specialized electronic platforms and field research)	5
3.4.3. Preparing of seminars/laboratories/projects, homework, papers, portfolios and essays	5
3.4.4. Tutorial coaching	-
3.4.5. Examinations	2
3.4.6. Other activities	
3.7. Total individual study hours	22
3.8. Total hours per semester	50
3.9. Number of ECTS credits	2

4. Prerequisites (if applicable)

4.1. Curriculum related	
4.2. Competence related	

5. Conditions (if applicable)

5.1. for the lecture	Projector, blackboard
5.2. for the seminar	Projector, beackboard, LAN
5.3. for the laboratory	-
5.4. for the project	-

6. Specific educational objectives (competences to be acquired)

6.1. Competențe profesionale	C2. Mathematical processing of data, analysis of phenomena and processes.
6.2. Competențe transversale	CT1. Applying the rules of organized and efficient work, of responsible attitudes towards teaching-scientific field, to value their own creative potential, while respecting the principles and norms of professional ethics. CT3. Efficient use of information, communication resources and assisted education both in Roumanian and in an internationally widespread language.

7. Course outcomes (resulting from the specific educational objectives to be acquired)

7.1. General outcomes	At the end of the course, the student should understand the tendencies and reasons for the development of Computer Science.
7.2. Specific outcomes	The student should understand the principles and methods of Computer Science The student should learn the landmark problems that lead to breakthroughs in Computer Science; The student should learn about the most recent developments in the field of Computer Science.

8. Outline (if applicable)

8.1 Lecture Outline	Teaching methods	Remarks
1. Logic and abstract machines	Presentare, Dezbateri	2 hours
2. Computing machines	Presentare, Dezbateri	2 hours
3. Distributed computing	Presentare, Dezbateri	2 hours
4. Programming languages	Presentare, Dezbateri	2 hours
5. Operating systems	Presentare, Dezbateri	2 hours
6. Machine learning	Presentare, Dezbateri	2 hours
7. Internet	Presentare, Dezbateri	2 hours
8.2 Lecture References 1. <i>The Essential Guide to Computing: The Story of Information technology</i> (Essential Guide Series) (Prentice Hall 2000). 2. P. Ceruzzi: <i>Computing – A concise history</i> (MIT Press, 2012). 3. M.Campbell-Kelly and W.Aspray: <i>A History of the Information Machine</i> .(Westview Press, 2004).		
8.3 Seminar Outline	Teaching methods	Remarks
Various problems (chosen by students)) from topics presented in lectures	Solving problems, debate, writing a scientific paper	28 hours
8.4 Seminar References 1. <i>The Essential Guide to Computing: The Story of Information technology</i> (Essential Guide Series) (Prentice Hall 2000). 2. P. Ceruzzi: <i>Computing – A concise history</i> (MIT Press, 2012). 3. M.Campbell-Kelly and W.Aspray: <i>A History of the Information Machine</i> .(Westview Press, 2004).		
8.5 Laboratory Outline	Teaching methods	Remarks
8.6 Laboratory Outline		
8.7 Project Outline	Teaching methods	Remarks
8.8 Project Outline		

--

Evaluation / Grading (if applicable)

Activity type	Evaluation criteria	Evaluation methods	Percentage of the final grade
10.1. Lecture	Essay on development of a particular topic (concept/algorithm/device) in Computer Science	Written	70%
10.2. Seminar	Participation of the student in debates during the semester.	Oral	30%
10.3. Laboratory			
10.4. Project			
10.5 Minimal performance standard A fair essay on the chosen topic.			

Course coordinator
Prof.Adrian Palcu, PhD

Seminar/laboratory/project coordinator,
Prof.Adrian Palcu, PhD

Head of the Department
Lector Lorena-Camelia Popa, PhD

Dean
Prof. Sorin-Florin Nădăban, PhD