

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Computer Hardware				
Head of course	MSc Jasminka Tomljanović, Senior Lecturer				
Study programme	Professional undergraduate study Information Science				
Status of a course	Obligatory				
Year of study	1	Semester	II	ECTS credits	3
Teaching plan (L + E + S+ Pr)	2+0+1+0				
Goals of a course					
Introduce students to the architecture and principle of computer operation, define system board hardware and interpret their interdependence, input and output units, and monitor the development of the latest hardware.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 1: Describe the architecture and working principle of computers and components, and the basic features of operating systems. Outcome 12: Apply engineering methods and principles in information science. Outcome 14: Participate in teamwork. Outcome 15: Independently present professional content in written and spoken form in Croatian and English.					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> Describe the basic computer architecture Recognize the motherboard hardware and interpret their interdependence Explain how the processor connects to memory and I/O units Distinguish the roles of major computer components including processor, memory, buses and I/O devices Disassemble and assemble a computer Monitor the development of new technologies and latest hardware 					
Content of a course					
<p>Professional study of Informatics has as its final goal preparation and presentation of the bachelor paper. This bachelor paper represents technical elaboration of a specific problem. The student is expected to demonstrate his ability to use methods and techniques of analysing and presenting business and market situations.</p> <p>When elaborating the selected theme, the student applies acquired knowledge and expertise. The choice of theme is in line with the syllabus of the professional study of Informatics. The student works on the theme supervised by his mentor. The paper has to contain between 30 and 50 pages and has to be handed in four copies. Through presentation of the bachelor paper before a Board, the student's knowledge and presentation of the specific problem is tested as well as his overall knowledge gained during the studies.</p>					
Teaching modes	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
Comments					
Students' obligations					
Grading, evaluation and monitoring of students' work continuously during lectures and exams					
Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of					

students.

Continuous check-up:

Outcomes	Pre-exam I	Pre-exam 2	Assignment	Threshold	Max
Outcome 1	10%			5%	10%
Outcome 2	10%		5%	7,5%	15%
Outcome 3	15%	10%		12,5%	25%
Outcome 4	15%	10%		12,5%	25%
Outcome 5			10%	5%	10%
Outcome 6		10%	5%	7,5%	15%
Percentage of ECTS	1	1	1		
Total	50%	30%	20%	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Exam term:

Outcomes	Written exam	Oral exam	Max
Outcome 1	5%	5%	10%
Outcome 2	5%	15%	20%
Outcome 3	10%	15%	25%
Outcome 4	10%	15%	25%
Outcome 5	0%	10%	10%
Outcome 6	5%	5%	10%
Percentage of ECTS	1,5%	1,5%	
Total	35%	65%	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

Obligatory literature

1. Darko Grundler, Primijenjeno računarstvo, Graphis, Zagreb, 2000.
2. Darko Grundler, Kako računalo radi, Pro-Mil, Varaždin, 2004.
3. Internet

Additional literature

1. V. P. Heuring, H. F. Jordan, Computer System Design and Architecture, Addison-Wesley, Menlo Park, 2001.

