

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Introduction to Programming				
Head of course	Associate Professor, PhD Alen Jakupović				
Study programme	Professional undergraduate study Information Science				
Status of a course	Obligatory				
Year of study	1	Semester	II	ECTS credits	5
Teaching plan (L + E + S+ Pr)	1+3+0+0				
Goals of a course					
Acquire competencies for computer programming in procedural programming language.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 2: Apply business information system design methods. Outcome 4: Develop an application solution for the Internet and desktop environment. Outcome 12: Apply engineering methods and principles in information science.					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> 1. Apply pseudocode and block diagram to display algorithms 2. Apply simple and complex data types and files in the design of computer programs 3. Apply procedures in the design of computer programs 4. Apply all algorithmic structures in the design of computer programs 5. Apply a debugger to a computer program 					
Content of a course					
<p>Basic concepts of programming and conditions of development. System elements of program support. Generations of programming languages, translating, compiling, emulation, block diagram, flowchart. Development of programming structural techniques. Structural flowchart. Algorithms. Basic programming structures. Working with databases-basics. Life cycle of a software product, development methods of programming software product Programming language C. Encoding in C language, declaration, simple commands, mathematical operations, strings, matrixes, functions, uses of functions, processing, control instructions. The program structure. Content of exercises: program development from business processes in programming language C.</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	Written test	Practical tasks	Threshold	Max
Outcome 1	5 %	10 %	7,5 %	15 %
Outcome 2	5 %	20 %	12, 5%	25 %
Outcome 3	5 %	24 %	15 %	30 %
Outcome 4	5 %	20 %	12, 5%	25 %
Outcome 5		5 %	2, 5%	5 %
Percentage of ECTS	1	4	-	-
Total	20 %	80 %	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 %	10 %	65 %
Outcome 2	5 %	20 %	10 %
Outcome 3	5 %	24 %	10 %
Outcome 4	5 %	20 %	10 %
Outcome 5		5 %	5 %
Percentage of ECTS	1	4	-
Total	20 %	80 %	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. Jakupović, A.; Šuman, S.: Osnove programiranja, Veleučilište u Rijeci, Rijeka, 2014.

Additional literature

1. McConnell, S.: Kod iznutra, Znak, Zagreb, 1995.
2. Čukman, T.; Bolt, V.: C/C++, Procon, Zagreb, 1994.
3. Viduli, R.: Od sada programiramo u C-u, Školska knjiga, Zagreb, 1993.
4. Eckel, B.: Thinking in C++, Volume 1, 2nd Edition,
<http://www.planetpdf.com/developer/article.asp?ContentID=6634>

