Course unit Descriptor	Faculty of Economics Subotica 	UNIVERZITET U NOVOM SADU UNIVERSITY OF NOVI SAD

GENERAL INFORMATION	
Study program in which the course unit is offered	Business Informatics
Course unit title	Structured Programming
Course unit code	OAS-PI03
Type of course unit[1]	Compulsory
Level of course unit[2]	First
Semester when the course unit is offered	Second
Year of study (if applicable)	First
Number of ECTS allocated	6
Name of lecturer/lecturers	Marton Sakal, Lazar Raković
Mode of course unit delivery[3]	Face-to-Face
Course unit pre-requisites (if any)	–

PURPOSE AND OVERVIEW (max 5-10 sentences)

Without assumption of prior programming experience, the class will be using the C programming language (console application). This is a beginner course in programming, using procedural paradigm. The emphasis is placed on learning programming techniques, understanding key algorithms and creating well-designed, structured programs while emphasizing that learning programming techniques takes priority over mastering a particular programming language. High significance is assigned to practical problem solving. Students are expected to invest a significant amount of effort both during tutorial sessions and in independent individual work.

LEARNING OUTCOMES (knowledge and skills)

Ability to:

- understand the basic terminology used in computer programming
- understand and use IDE
- write, compile, debug and document C applications
- design programs involving decision structures, loops, functions, typical data structures, basic data files and typical

[1] Compulsory, optional
[2] First, second or third cycle (Bachelor, Master's, Doctoral)
[3] Face-to-face, distance learning, etc.

- algorithms
- solve real world computational problems

SYLLABUS (outline and summary of topics)

Theory
Data types, variables, assignment, arithmetic/relational/logical operators, control structures, arrays, pointers, functions, recursion, scoping, strings, dynamic memory allocation, structures, CSV files, exception handling, sorting, debugging, testing, flowcharts, documentation.

Practice
Data types, variables, assignment, arithmetic/relational/logical operators, control structures, arrays, pointers, functions, recursion, scoping, strings, dynamic memory allocation, structures, CSV files, exception handling, sorting, debugging, testing, flowcharts, documentation.

LEARNING AND TEACHING (planned learning activities and teaching methods)

Lectures, Tutorials, Demonstrations, Problem-solving, Small group activities, Brainstormings

REQUIRED READING

Peter Prinz, Tony Crawford (2006), C in a Nutshell, O'Reilly, Sebastopol, CA, ISBN: 978-0596006976
Lecture Handouts

ASSESSMENT METHODS AND CRITERIA

Practical work: 10 points
Preliminary exam(s): 20 points
Written exam: 40 points
Oral exam: 30 points

LANGUAGE OF INSTRUCTION

Serbian, English