## **Course title: Fundamentals of Programming 2**

Course code: 63044

ECTS credits: 8

Requirements: None

## **Basic information**

Level of studies: Undergraduate applied studies

Year of study: 1

Trimester: 3

Goal: Introducing the main principles of a programming language including arrays, pointers, characters, strings, functions, structures and files with examples of their implementation in the C programming language.

Outcome: Upon completion of the course, students should be able to create projects in the C programming language, develop good programming skills and use a modern compiler and debugger in Microsoft Visual Studio.

## Contents of the course

Theoretical instruction

- 1. Arrays
- 2. Pointers and dynamic memory allocation
- 3. Characters and strings
- 4. Functions
- 5. Structures
- 6. Files

Practical instruction (Problem solving sessions/Lab work/Practical training)

1. Practical classes include writing and debugging programs in Microsoft Visual Studio environment using programming techniques introduced in theory classes.

## **Textbooks and References**

- 1. Brian W. Kernighan, Dennis M. Ritchie, Programski jezik C, prevod drugog izdanja, CET Computer Equipment and Trade, Beograd, 2003.
- 2. Laslo Klaus, Programski jezik C sa rešenim zadacima, Akademska misao, Beograd, 2004.
- 3. Clovis L. Tondo, Scott E. Gimpel, Programski jezik C: Rešenja zadataka, prevod drugog izdanja, CET Computer Equipment and Trade, Beograd, 2004.

| 4. Laslo Kraus, Rešeni zadaci iz programskog jezika C, Akademska misao, Beograd, |
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| 2005.  |
| 5. Lecture presentations (electronic and printed)                                |
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| Number of active classes (weekly)  |
| Lectures: 4  |
| Practical classes: 4   |
| Other types of classes: 0  |
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| Grading (maximum number of points: 100)  |
| Pre-exam obligations: Points   |
| Activities during lectures: 10   |
| Activities on practical exercises: 20  |
| Seminary work: 0   |
| Colloquium: 20   |
| Final exam: Points   |
| Written exam: 50   |
| Oral exam:   |
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| Lecturer: Milorad Paskaš, PhD  |
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| Associate:   |
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