Computer Programming and Programming Languages

Lecturer, Phd, Eng.
TEODORA SANISLAV

October 2024

Who teaches

- Teodora Sanislav - lectures and laboratory sessions
  - Personal website: `http://users.utcluj.ro/~tsanislav/`
  - Contact information
    - Email: Teodora.Sanislav@aut.utcluj.ro
    - Office address: 2 Observatorului Street, Room 301
    - Microsoft Teams chat whenever needed (but at reasonable hours)

When is taught

- Lectures: 2 hours/week, 14 weeks with all students – every Monday, between 2:00 P.M. - 4:00 P.M., 26-28 George Baritiu Street, Amphitheatre D21
- Laboratory sessions: 2 hours/week, 14 weeks with each half-group – every Tuesday and Wednesday as scheduled, 8 George Baritiu Street, Room BT6.03
- Consultation sessions: 1 hour/week, 8 George Baritiu Street, Room BT6.03 (if needed)
- Self-study: 69 hours during the entire semester
- Worth 5 credits

Where are the classrooms

- 26-28 George Baritiu Street, Amphitheatre D21

- 8 George Baritiu Street, 6th floor, Room BT6.03

What is taught

- To design and implement computer programs in the C programming language using the structured/modular approach
- To assimilate a programming style
- To determine the causes of programming errors and to correct them

Means of teaching

- Lectures
  - CP introduction. C programming language history. Tokens
  - Data representation. Data types. Variables and expressions. Statements
  - Arrays. Preprocessor directives. Programming style
  - Pointers
  - Functions
  - Memory management. Modular programming. Debugging
  - Strings. Command-line arguments
  - Structures. Unions. Enumerations
  - Files
- Lectures resources
  - Slides available at `http://users.utcluj.ro/~tsanislav/teaching.html#cp`. The slides are made available in time for each lecture.
  - Access password: CJCPPL
  - C programming books available on **CPPL, 2024 - 2025 Team (team code: nn5vo6d)**

Means of teaching

- Laboratories
  - Interactive Development Environments (IDEs) for C. Setting up and using Codeblocks IDE
  - C Input/Output (I/O)
  - Data Types and Expressions in C
  - Statements in C
  - Pointers in C
  - Functions in C
  - Dynamic Memory Allocation and Modular Programming
  - Strings in C
  - Structures, Unions, Enumerations in C
  - Files in C
  - Embedded Systems Programming Case Study

Means of teaching

- Laboratories structure by weeks

1st Week	2nd Week	...	12th Week	13th Week	14th Week
- Labor Protection - A short presentation of each student about him(her)(them)self - Code::Blocks Introduction	Lab1	...	Lab 9	Recovery	Evaluation (Laboratory test)

- Laboratory sessions resources
  - Pdf documents available at `http://users.utcluj.ro/~tsanislav/teaching.html#cp`.
  - Access password: CJCPPL
  - PCs or laptops equipped with gcc compiler and Code::Blocks IDE

Rules

- To pass the exam
  - Attend the laboratory sessions
    - Maximum 2 laboratory absents are allowed and they will be recovered at the end of the semester (13th week)
    - $2 \leqslant$ No. of absents $\leqslant 4 \Rightarrow$ Recovery fee
    - `https://www.utcluj.ro/media/page_document/157/ECTS_2023.pdf` - articles 6.4, 6.5
  - Study and learn
- Grading
  - 40% laboratory test (LT), LT $\geqslant 5$
  - 60% written exam (WE), WE $\geqslant 5$
  - Final $=$ 0.40 * LT $+$ 0.60 * WE

Very important!!!

Please do not be late!