

Programming 1

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Introduction

Programming 1 covers the basic knowledge of programming in the student's bachelor's degree, and particularly in relation to programming objects and tools in C++ language. Students in this course will gain the necessary knowledge to effectively develop applications in an integrated development environment; to create and manipulate related electronic documentation and a wide range of surveillance knowledge in the field of information technology. Lectures are generally conceived as a combination of interpretation and *live* demonstration of various topics (if relevance to the topic is appropriate and feasible). It also allows for interaction (questions, comments) by students within the lecture. Homepage of the course: Associate Professor Petr Saloun - <http://www2.cs.vsb.cz/saloun-zp/doku.php> and Associate Professor Donald Davendra - http://mr1.cs.vsb.cz/people/davendra/zp_course.html.

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Academic Schedule for year 2015/2016

- **Lectures and labs**
Lectures are given weekly, labs as well, homeworks are 3× per semester and they are announced.
- Introduction to the requirements for completing the course, work in the campus network, the use of passwords, access to software, introduction to the basics of programming.
- Work and the use of CodeBlocks to C/C++.
<http://www.codeblocks.org/>
- ProgTest assignment and weekly submission.
<http://progtest.cs.vsb.cz>
Doxygen usage
- Final test and final inspection of Projects.

Terms of the Credit

Submission of all **3** homework tasks and at least **50%** of interim tasks, semester project and passing of the final exam. The materials will be deposited exclusively through the web interface referenced from the homepage of the subject. CodeBlocks usage is required for code (compatibility), Doxygen for documentation generation (semester project).

Max	Min	Description
24	12	Laboratory work, weekly exercises, 2pt x 12 labs, minimum 50% points
26	14	Homework: 6pt + 10pt + 10pt, all should be submitted, minimum at least 51% of the points.
20	10	Semester submissions are given as: <ul style="list-style-type: none"> • Semestral submission project contains: <ul style="list-style-type: none"> – Documentation and test data files, functionality will be evaluated; – Presentation file; – Source code files.
30	15	Final Examination
100	51	

Submitting project (details on the website subject) and the successful execution of labs and term test. Credit rating of the project is based on the processing and delivery of the project, which will consist of three parts:

1. Functionality, documentation and test data,
2. Presentation,
3. Source code of the application.

The aim of the project is to create a functional program as input and outputs to HTML or GUI.

Requirements of the Term Project

Max	Min	Description
7	5	functionality
2	1	work with files and programming style
2	1	work with dynamically allocated memory
2	1	output to HTML or GUI application
7	2	programming and user documentation (such as Doxygen), presentation, test data and outputs
20	10	

Mandatory requirements include:

- if the code fails to execute, the project is rejected.
- simple projects with documentation,
- mandatory presentation is part of project delivery, template PPT or LaTeX / PDF, (no answer should be at a computer during examination of the code)
- should have Doxygen generated documentation.

References