Introduction to the Python Programming Language
2015/16, 1ˢᵗ semester

Code: INGV381L
Type: Optional, lab.
Weekly hours: 0+2
Credits: 2
Instructor: Dr. Szathmáry László
Instructor's homepage: `http://www.inf.unideb.hu/~szathml`
Pre-requisite: Programming Languages 1 (IN[GHJ]K301)

Course Mark

At the end of the semester you will get a practical course mark. For this, you will have to attend the labs. Max. 3 absences are tolerated. If you are absent more than 3 times, you will automatically fail the course.

About being late: if you are a few minutes late, I can tolerate that. If you are late more than 10 minutes, then it'll be considered as a "half absence". If you do this twice, that will be registered as 1 absence.

There will be two classroom tests. The first one is on paper, while the second one is on computer. Your mark will be the average of the marks you get on the tests. If this mark is a real number (e.g. 3.5, 4.5, etc.), then I will take into consideration your lab work and homeworks. If someone solved less than 80% of the homeworks, then (s)he will get a worse mark than the average of the two tests.

If someone is not satisfied with his/her mark, (s)he will have the possibility to improve (or decline) the final mark in the last week of the semester. In this case, the final mark can be max. one mark better (or worse). The student will have to solve some programming exercises on a computer, and (s)he will have to know the concepts related to the Python programming language. If someone failed both classroom tests, (s)he cannot improve the final mark.

Competene

The goal of the course is to teach the basics of the Python programming language. At the end of the course students will be able to implement simple programs in Python.

Topics

Position of Python among other programming languages; using the Python shell; variables, operators, standard types, basic data structures (list, tuple, dictionary), control structures, loops, functions; packages, modules; file handling; exceptions; classses, objects; JSON; regular expressions; connection with the operating system.

Bibliography

- Guido van Rossum: Python Tutorial (http://docs.python.org/tutorial/index.html), 2015
- Wesley J. Chun: Core Python Programming (2nd Edition), 2009
- Doug Hellmann: The Python Standard Library by Example (Developer's Library), 2011
- Doug Hellmann: Python Module of the Week (http://www.doughellmann.com/PyMOTW/contents.html)
- Zed A. Shaw: Learn Python The Hard Way (http://learnpythonthehardway.org/), 2011
- Allen B. Downey: Think Python (How to Think Like a Computer Scientist, http://www.greenteapress.com/thinkpython/), O'Reilly, 2012
- Mark Summerfield: Rapid GUI Programming with Python and Qt (1. fejezet), 2007
- Mark Pilgrim: Dive Into Python 3 (http://www.diveintopython3.net/), 2009