

Tartalomjegyzék

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General informations

- Lecturer: Ferenc Wettl ([wettl](#))
- Labs: Gábor Borbély ([borbely](#))
- **Lecture**
 - ◆ Monday 9:15-10:00 H601
- **Lab**
 - ◆ Wednesday 12:15-14:00 (H27)
 - ◆ Thursday 12:15-14:00 (H601)

Requirements

Course Requirements

Midterms

The midterms will worth 20 points each. You have to reach a minimum of 10 points in every midterm!

1. midterm: 9th March, Monday 4pm-5pm, room KM34 [pdf](#)
 - ◆ repetition: 7th April, Tuesday 5pm-6pm, in hazi-system
 2. midterm: 14th April, Tuesday 6pm-7pm, in hazi-system [pdf](#)
 - ◆ again: 28th April, Tuesday 6pm-7:15pm [pdf](#)
 - ◆ repetition: 12th May, Tuesday 6pm-7:15pm
 3. midterm: 19th May, Tuesday 6:05pm-7:20pm [pdf](#)
 - ◆ repetition: 26th May, Tuesday 6pm-7:15pm
- extra repetition: 2nd June, 6pm-7:15pm
 - ◆ You can repeat one of the previously failed midterms.

Quick Quiz

At the beginning of every lab, there will be a Kahoot quiz, testing the previous material.

- <https://kahoot.it/>
- The maximum point (for the semester) is 10
- You have to reach a minimum of 5

- There will be 5 extra quizzes, so the 100% is actually 10 points out of 15!

Lectures

The lectures can be read in html format or you can run them as jupyter notebook.

1. Getting started with Python [ipy nb html](#)
2. Loops and lists [ipy nb html](#)
3. Functions [ipy nb html](#)
4. Data structures [ipy nb html](#)
5. Strings and regular expressions [ipy nb html](#)
6. OOP [ipy nb html](#)
7. OOP 2. [ipy nb html](#)
8. More on functions [ipy nb html](#)
9. File operations, command line arguments [ipy nb html](#) [E0.csv](#)
10. Programming strategies [ipy nb html](#)
11. Binary trees [ipy nb html](#)
12. Modules [ipy nb html](#)
13. Functional programming [ipy nb html](#)

Labs

We will use jupyter.math.bme.hu on the labs. You can start a similar notebook with the command `jupyter notebook` on your computer (if it is installed).

1. [lab](#)
2. [lab](#)
3. [lab](#)
4. [lab](#)
5. [lab](#)
6. [lab](#)
7. [lab](#)
8. [lab](#)
9. [lab](#)
10. [lab](#)
11. [lab](#)
12. [lab](#)
13. [lab](#)

Homework

- There will be 40 points of homeworks during the semester
 - ◆ 30 points is considered a 100% so there is 10 points of extra homework
 - ◆ You have to reach at least 15 points at the end of the semester
- You have to submit the homeworks to **hazi@math.bme.hu**
- Use your math account!
- The exercises should be submitted as an attachment file with the same name as the exercise.

For example, the exercise `fahrenheit` should be submitted by sending an email to the given address (before the deadline) with an attachment `fahrenheit.py`, a plain text file containing your code.

You can make such a text file with [Notepad++](#) or in jupyter with **New -> Text File**.

You can read more about the [homework tester system](#).

Homeworks

- 0. homework
 - ◆ **greeting_program**
 - ◆ **greeting_function**
 - ◆ Deadline: 2020.02.23 23:59:59
 - ◆ **1 point** if all of the tests are correct in both exercises

- 1. homework
 - ◆ **neighbors**
 - ◆ **1 point** if all of the 8 tests are correct
 - ◆ Deadline: 2020.03.01 23:59:59

- 2. homework
 - ◆ **packing**
 - ◆ **evaluate**
 - ◆ **product_x**
 - ◆ **magic_square**
 - ◆ Deadline: 2020.03.08 23:59:59
 - ◆ **1 point** each

- 3. homework
 - ◆ **advanced_indexing**
 - ◆ **matrix_sum**
 - ◆ **divisor_dict**
 - ◆ **midterm_result**
 - ◆ Deadline: 2020.03.15 23:59:59
 - ◆ **1 point** per exercise

- 4. homework
 - ◆ **moduloz_init**
 - ◆ **moduloz_operations**
 - ◆ **matrix_init**
 - ◆ **matrix_operations**
 - ◆ Deadline: 2020.04.05 23:59:59
 - ◆ **1 point** per exercise

- 5. homework
 - ◆ **variadic_intersect**
 - ◆ **quadratic_solve**
 - ◆ **matrix_error**
 - ◆ **moduloz_matrix**
 - ◆ Deadline: 2020.04.13 23:59:59
 - ◆ **1 point** per exercise

- 6. homework
 - ◆ **decode_date** 1 point
 - ◆ **argv_sum** 1 point
 - ◆ **tortoise** 1 point
 - ◆ **midterm_csv** 2 points
 - ◆ Deadline: 2020.04.26 23:59:59

- 7. homework
 - ◆ **parenthesis_depth** 1 point
 - ◆ **descartes_product** 1 point
 - ◆ **matrixlog** 1 point

- ◆ **tree_cut** 2 points
- ◆ Deadline: 2020.05.10 23:59:59

8. homework

- ◆ **calculator_basic** 1 point
- ◆ **calculator_parenthesis** 2 points
- ◆ **calculator_function** 2 points
- ◆ Deadline: 2020.05.17 23:59:59

9. homework

- ◆ **num_int** 1 point
- ◆ **num_diff** 1 point
- ◆ Deadline: 2020.05.31 23:59:59

10. homework

- ◆ Make any program you want (in python 3.6)
- ◆ Send it to hazi@math.bme.hu
- ◆ The attachment should be a `.py` file and the filename should contain **HW9**.
- ◆ I will grade the correctness and complexity of the program.
- ◆ You can get maximum 5 points.
- ◆ Deadline: 2020.05.31 23:59:59