

Programming Practice (Python) -E2(2)

- Scientific computation with Python

Part 2: Programming Exercise (3 sessions)

The goal is to put in application the knowledge acquired in part 1 and experience real-world software development challenges.

The students will have to:

- Propose a solution,
- Implement the solution,
- Test the solution.

The schedule and contents are subject to change based on class progress.

Total 14 classes and one feedback class.

[履修要件]

For this course, no prior programming experience is required. Sample programs will be provided as needed. For practicality, some may contain mathematical concepts and calculations, while there are no explanations for mathematical foundations.

Students must bring their own computer to participate in this course (BYOD).

The course will be using Python 3, available for free on any recent versions of the main operating systems (Windows, Mac, or Linux). Installation is straight-forward; if needed, the instructor will provide extra help to students.

[成績評価の方法・観点]

The evaluation will be based on:

1. An assignment given during part 1 (50%)
2. A final programming task done during part 2 (50%).

The notation criteria will be explained during the classes.

[教科書]

使用しない

[参考書等]

(参考書)

For an application-oriented presentation, you can see [1] for an in-depth presentation you can refer to [2].

There are many on-line resources about Python, check the official Python website (<https://www.python.org/>).

[1] Al Sweigart, Automate the Boring Stuff with Python, 2nd edition, (No Starch Press) ISBN: 978-1593279929 (Python3)

[2] Mark Lutz, Programming Python, 5th Edition, (O'Reilly Media, Inc.) ISBN: 9781449398712 (Python2 & Python3)

(関連URL)

<https://www.python.org/>(Python Software Foundation)

[授業外学修（予習・復習）等]

Students are expected to review the class material during the delivery week to follow the course materials.

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Students who cannot complete the tasks given during a class should complete them before the next class to follow the course materials.

[その他（オフィスアワー等）]

There are no specific office hours. Students can send emails to communicate with the instructor regarding their assignments, questions, and other inquiries.