EOSC 213: Computational Methods in Geological Engineering

Lecture 2: Python refresher for scientific computing

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Course Logistics: Office hours scheduling

We want to choose office hours that work well for you.

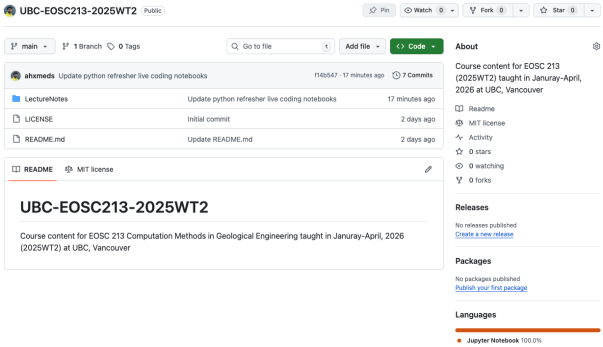
Please think about and tell us:

- A good time for **TA office hours (on Zoom)**. Use this when2meet link for scheduling: https://www.when2meet.com/?34223342-8MfKx.
- A good time for **Instructor office hours (in person)**. Tue or Thu after lectures?

We will finalize office hours based on your feedback.

Course Logistics: GitHub Repository

- All lecture notebooks and live-coding material will be posted here
- You are encouraged to:
  - Pull updates regularly
  - Run notebooks locally
  - Experiment and modify code
- Homework instructions may also reference this repository



Link:

`https://github.com/ahxmeds/UBC-EOSC213-2025WT2`

Course Logistics: Homework 1

- Material: Python refresher and basics of ODE
- Will be posted by Friday evening (hopefully). Keep an eye on Canvas announcements.
- Due on **Fri, 16 Jan, 2026 at 11:59 pm**
- Submission instructions will be posted on Canvas

Plan for today (80 minutes)

- **Part A (logistics + live coding, ∼40 min):** Python refresher
- **Part B (in class activity, ∼40 min):** Work in groups and try to finish 4 small programming activities. Solutions will be posted later on the course GitHub page.

Goal: by the end, you should be comfortable reading and writing array-based code that we will reuse all term.

Now we live-code

- We will walk through the Lecture 2 notebook together
- I will type from scratch (and debug in real time). Feel free to interrupt with questions
- In the second half of today's class, we will do an in-class coding activity

Goal for today: you leave with enough confidence to start Homework 1 immediately.