math 1ls3

Why computer labs?

You will use programming to help you understand math concepts, and to enhance working with mathematical models.

You will use Python (version 3.0 or above) on a free online platform called Jupyter.

You will not be asked to write code from scratch, but rather understand what a given code does and then modify it as needed to answer questions.

All information about labs will be announced in class and posted on the course web page.

You will start working on the labs for credit after the end of drop/add period. Before then, do as suggested on the web page.

Why Python, why computer programming?

Various numerical approaches in calculus can be explored further using a modern computer programming language such as Python.

By the way ... Python is widely used in the real world, for instance in working with big data.

You will deepen your conceptual understanding by having an opportunity for a dynamic, interactive exploration of mathematical concepts.

Computer programming will extend your learning, thinking, and problem-solving beyond present constraints.

Start ...

A computer program is a sequence of lines ("code") that computer recognizes and acts accordingly.

You have to obey all rules for how these commands are entered into a notebook.

Python can work with all kinds of math objects (numbers, functions, sequences = tables of values ("arrays"), vectors, matrices, etc.)

Have fun with Python ©