

The goals of this first discussion section are:

1. Install Anaconda on your computer and access Jupyter lab, or a Jupyter notebook.
2. Get familiar with the Jupyter notebook for numerical simulations
3. Create simple models (students should be creative !)

Participation in discussion section counts as 5% of the grade. Completion of the worksheets counts as 20% of the grade. **Submit your worksheet work by January 27th at 2:59pm.**

1. Install Anaconda and launch a Jupyter notebook.
  - (a) Download instructions can be found here <https://www.anaconda.com/products/individual>. We recommend to install Python 3.8 (update your Python package if you have installed it already).
  - (b) Launch Anaconda Navigator and open a Jupyter notebook <https://docs.anaconda.com/anaconda/user-guide/getting-started/>. If you are comfortable with using a terminal, you may also launch it directly by executing the command `jupyter notebook`.
  - (c) Open a Jupyter notebook, and play a little bit: let's code some basic Python commands ! Take a look at the user guide <https://jupyter-notebook.readthedocs.io/en/latest/notebook.html>. We strongly recommend to take a look at the open source lessons from Software Carpentry <https://swcarpentry.github.io/python-novice-inflammation/>
  - (d) Make a plot in your jupyter notebook. We strongly recommend to take a look at the open source lessons from Software Carpentry <http://swcarpentry.github.io/python-novice-gapminder/09-plotting/index.html>. You may for instance copy the first 2 cells given on this link.
  - (e) Install nteract <https://nteract.io/>. This will allow you to view quickly .ipynb without launching Anaconda (very practical to view .ipynb files from email for example).
2. Watch the following video <https://www.youtube.com/watch?v=HW29067qVWk>. What is the video about ? What did you learn ? Write a small paragraph to summarize. *A person who didn't watch the video should be able to understand your statement.*
3. Work on the exercises 1.1, 1.2, from the typed notes `Math150_Chapter1.pdf`
4. Submit your work on Catcourses under the assignment **Worksheet 1 as a single .ipynb** with all previous assignments in it. Use the markdown (or text) cell in the Jupyter Notebook to type your (non-code) answers.