Unit's Objectives

This class aims at teaching **modern programming techniques**.

After completing the class, you will be able to read and write python programs of medium complexity. You will be able to take advantage of existing scientific packages and libraries available in the rich scientific Python ecosystem in order to **query** & **analyse complex environmental dataset**.

No prior knowledge of Python is required, but I'll assume that you are familiar with a similar language (Matlab, IDL, R…) and basic programming structures (loops, functions, conditional blocks…). This is *not* an introductory course, although we will shortly revisit programming basics in order to learn the Python syntax.

The course encompasses the following topics, developed by means of concrete examples and practicals:
- Introduction to Python for data-science: packages, modules, functions, scripts
- Real world applications!

My main objective for this course is to get you prepared to learn independently about the more advanced tools you'll need for the rest of your studies & professional life.

Unit's Assessments

The unit will be graded based on **three assessments**:

- a **mid-term group presentation** in which you will frame your project and research questions **(week 6)**: 10%
- an **end-term group project** evaluate as a team submission **(week 11)**: 60%
- an **oral presentation** at the end of the semester **(week 12)**: 30%

A positive evaluation of each of these elements is mandatory to pass the class!

The oral presentation itself will be graded as a group work (50%) and individual contribution (50%).