

## » Course Content

During this course, you will learn about:

- Core concepts about Python syntax: Data types, blocks and indentation, variable scoping, iteration, functions, methods and arguments
- Different ways to control program flow using loops and conditional tests
- Regular expressions and pattern matching
- Writing functions and best-practice ways of making them usable
- Reading from and writing to files
- Code packaging and Python libraries
- How to work with biological data using external libraries (if time allows).

## » Learning Outcomes

After this course you should be able to:

- Edit and run Python code
- Write file-processing python programs that produce output to the terminal and/or external files.
- Create stand-alone python programs to process biological data
- Know how to develop your skills in Python after the course (including debugging)

### **Learning objectives (ie goals for the teachers)**

- Increase the student's toolbelt for better quality and performance at work
- Make students understand that there is more to programming than only *knowing* the syntax of a language. This expertise is precisely what **NBIS** provides.

Syntax

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Programming