Coding for Linguists  
Course Contents & Objectives

Course code = LN6209

Year of presentation = 2021-22

Prerequisites = A personal laptop or PC

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| **Week** | **Topics** |
| **1** | Getting started with Python and software development:  Values, variables, operators, and types |
| **2** | Functions, debugging and testing |
| **3 & 4** | Conditional execution, collections, iteration, exceptions |
| **5** | Reading and writing files |
| **6** | Analysis of text – part I |
| ***7*** | *Reading week* |
| **8** | Regular Expressions |
| **9** | Analysis of text – part II |
| **10** | Data visualisation |
| **11** | Jupyter Notebooks |
| **12** | More software libraries: ANTLR, ST, NLTK, ...  Other languages, big data, machine learning, artificial intelligence, chatbots and other recent developments. |

Learning Objectives

After successfully completing this module students will be able to:

* Write applications in Python
* Use the standard Python libraries
* Understand what values, variables and functions are and know how to create and use them
* Read and write files using Python
* Understand what regular expressions are and be able to use them
* Analyse text using the math, statistics and re libraries
* Create graphs and charts using Matplotlib and Seaborn
* Create and use Jupyter notebooks

Students will also have:

* An understanding of the iterative ‘analyse-design-build-test-evaluate’ software development process
* An awareness of recent advances in computer science relevant to linguistics

Assignments

One assignment is issued at the end of every lesson.

Five of the assignments are assessed as part of your module grade.

Assignments are normally due 24 hours before the next lesson.