Python Programming

Joe Carthy

UCD School of Computer Science University College Dublin Ireland

Welcome

Welcome Everyone

We at UCD are very happy to be delivering this course.

We want you to enjoy it !!

Welcome

Learning to program takes some time so be **PATIENT** with yourself.

If you practice every week you will **succeed** and **we are here** to help you succeed.

The **ONLY** way to learn to program is by **writing programs** – write lots of **small** programs!

The key thing is to learn and understand **so don't worry** too much about assignments!

This course is made up of a series of online sessions for you to listen to.

The slides for every session are available.

The slides are based on a **Python Programming Handbook** which is available for you

Each week, you should listen to the recorded lesson for the week e.g. Lesson 1 for week 1 and so on.

Week1:

Lesson 1 Programming and Algorithms

Having listened to the recording, you should then attempt the weekly programming exercises for that week from the *Python Programming Handbook*

Lesson 1 Exercises

Solutions for all exercises are provided at the end of the handbook.

BUT ONLY look at the answers when you have *really* tried to complete the exercises.

There will be some assignments for each lesson.

You will submit these assignments by the Monday following each lesson.

Each week we will have tutorials.

The purpose of the tutorials is

- to help you understand Python programming AND
- 2. to share experiences with students studying in Ireland.

Course Outcomes

On successful completion of this course students should:

- Be familiar with the important concepts in Python programming
- 2. Understand the variables, assignment, conditional statements, loops, and input/output.
- 3. Be able to design algorithms to solve simple problems
- 4. Be able to write Python computer programs to implement algorithms
- 5. Be able to evaluate programs to find errors

A Selection of Literature

- There are lots of Python programming books
- There are also many Python resources on the Web
- Two good texts are:

Introduction to Computation and Programming using Python The MIT Press, Cambridge, Massachusetts, USA, 2013.

Learning Python (5th Edition)
Mark Lutz, O'Reilly Media, Sebastopol, California, USA, 2013.

Final Words

We look forward to working with you

You may have difficulty understanding my accent – some Irish people also have this difficulty! Often, I speak too quickly.

Good news: everything important is on the slides which are available for you to download, including the slides for this session.

Final Words

Please ask questions in the tutorials and share your experiences with our students so that our students can learn from your experiences.

Enjoy the course.