Cluster 5 (Biophysics) Sequence with 'C' (2018)

Welcome/Introduction (Student intros, course overview, check computer sign-ons)

Basic Computer/Unix Concepts

- Review parts of a computer: Hardware/Software

- Purpose of an Operating System

- Logging in/UCD System/Linux (Ubuntu)

- How to navigate Directories (Folders), Files

- How to start/close a terminal window

- Basic Linux Commands: Interactive session (ls, cd, pwd, mkdir, cat, more, mv, cp, rm, rmdir)

- How to use a text editor: gedit

Introduction to programming and C language

- What is a programming language?

- History/ Strengths of "C" language

- First C program: [helloworld.c]

- Compiling a C program

- Basic terminal entry and operations: printf, scanf [add.c]

- Variables, operations, expressions [variables.c]

- If-else statements [odd-even.c]

- For and while loops [countC.c] [distance.c]

- Computer Concepts: How numbers are stored/data types (discussion)

Solving math problems - "C" exercises

- Math concept: factorial [factorial.c]

- Solve quadratic equation [quadratic.c]

At this point, we switch to python language