

CB2-101 – Introduction to Scientific Computing

GBSC 703-01A (3 Credits)*

Computational Biology and Bioinformatics (CB2) Course at UAB

<http://www.uab.edu/cb2>

<http://cmb.path.uab.edu/training/cb2-101.html>

Fall 2015

Nov 5- 20, 2015

9:30 a.m. – 1:30 p.m.

(Location: Volker Hall VHG073)

Course Director:

Malay Basu, PhD
West Pavilion, Room P220
934-5251
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Guest Lecturer:

Emidio Capriotti, Ph.D.
University of Düsseldorf,
Düsseldorf (Germany)

Course Program

Week 1: Nov 5-6, 2015

11/05 Introduction to Linux
11/06 Linux Commands and Scripting

Week 2: Nov 9-13, 2015

11/09 Unix toolchains and programming languages
11/10 Introduction to python
11/11 Data Structure in python
11/12 Functions and modules
11/13 Python scripting

Week 3: Nov 16-20, 2015

11/16 Introduction to R
11/17 Basic statistics in R
11/18 Bioinformatics using R
11/19 Introduction to Bioconductor
11/20 Reproducible research in R

Reference:

Bioinformatics Data Skills (2015) Vince Buffalo

Registration:

The course requires registration through online form:

<https://goo.gl/KW2wzD>

*** If you're a graduate student and willing to get credit for this course please contact the course director directly.**

*** The course is a pre-requisite for our Bioinformatics course "CB2-201 Computational Biology and Bioinformatics" that will be offered in February, 2016. If you have plans to attend CB2-201 then we strongly suggest that you attend CB2-101.**