

CB2-101 Introduction to Scientific Computing

GBSC 703-Section 01A / CRN 57546

Computational Biology and Bioinformatics (CB2) Course at UAB
<http://www.uab.edu/cb2>

Fall 2014
November 6- 21, 2014
9:30 a.m. – 1:30 p.m.

Course Directors

Malay Basu, PhD and Emidio Capriotti, PhD
West Pavilion, Room P220
934-5251 or 975-2928
{malay@uab.edu, emidio@uab.edu}

Course Program

Week 1: November 6-7, 2014

11/6	Introduction to Unix	Malay Basu, PhD	VH G073
11/7	Unix Commands and Scripting	Emidio Capriotti, PhD	VH G073

Week 2: November 10-14, 2014

11/10	Program Languages	Emidio Capriotti, PhD	VH G073
11/11	Introduction to Python	Emidio Capriotti, PhD	VH G073
11/12	Data Structures in Python	Emidio Capriotti, PhD	VH G073
11/13	Functions and Modules	Emidio Capriotti, PhD	VH G073
11/14	Python Scripting	Emidio Capriotti, PhD	VH G073

Week 3: November 17-21, 2014

11/17	Introduction to R	Malay Basu, PhD	VH G073
11/18	Basic Statistics	Malay Basu, PhD	VH G073
11/19	Bioinformatics Using R	Malay Basu, PhD	VH G073
11/20	Introduction to Bioconductor	Malay Basu, PhD	VH G073
11/21	Reproducible Research in R	Malay Basu, PhD	VH G073

Basic Reference Materials

Previous CB2-101 course material
<http://cmb.path.uab.edu/training/cb2-101.html>

UNIX Tutorial for Beginners
<http://www.ee.surrey.ac.uk/Teaching/Unix>
Minimum required chapters 1-6

Python 2.x
<http://openbookproject.net/thinkcs/python/english2e/>
Minimum required chapters 1-12

Introduction to R
<http://cran.r-project.org/doc/manuals/r-release/R-intro.html>
Minimum required chapters 1-8

*The course has a limited number of participants please contact as soon as possible the instructors. This course is a 3 credits GBS course (GBSC 703-01A)