GBS 746-VT – Introduction to Scientific Computing

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

> Spring 2014 February 17-28, 2014 10:00 a.m. - 1:00 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:	<u>Februar</u>	y 1'	7-21,	2014
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2/17	Introduction to Unix	Malay Basu, PhD	Volker Hall (VH G073)
2/18	Unix Commands and Scripting	Malay Basu, PhD	Volker Hall (VH G073)
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2/19	Program Languages	Emidio Capriotti, PhD	Volker Hall (VH G073)
2/20*	Introduction to Python	Emidio Capriotti, PhD	Volker Hall (VH G073)
2/21	Data Structures in Python	Emidio Capriotti, PhD	Volker Hall (VH G073)

Week 2: February 24-28, 2014

2/24	Functions and Modules	Emidio Capriotti, PhD	Volker Hall (VH G073)
2/25	Python Scripting	Emidio Capriotti, PhD	Volker Hall (VH G073)
2/26	Introduction to R	Malay Basu, PhD	Volker Hall (VH G073)
2/27*	Basic Statistics	Malay Basu, PhD	Volker Hall (VH G073)
2/28	Bioinformatics Using R	Malay Basu, PhD	Volker Hall (VH G073)

Basic Reference Materials

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

^{*}Lectures on Thursdays will include CB2 Journal Club.