

COMPUTING FOR DATA SCIENCES

Overview of the Course

Sourav Sen Gupta

`sg.sourav@gmail.com`

Indian Statistical Institute

COURSE INFORMATION

Computing for Data Sciences

Code : BAISI-4 for PGDBA

Instructor : Sourav Sen Gupta

R C Bose Centre, ISI Kolkata

Course Website : <http://www.souravsengupta.com/cds2016/>

Lecture hours : Tuesdays and Thursdays (11:00 - 13:00)

Office hours : By appointment @ Office 404, Deshmukh Building

Email me at sg.sourav@gmail.com to fix the appointments.

GRADING FOR THE COURSE

Assignments	<i>Constitute 20% of the total grade</i> 05% : Coding assignment (R and Python) 10% : Competition (may be on Kaggle) 05% : Scribing notes for lectures To be completed in groups of size 4
Mid-Sem Exam	<i>Constitutes 30% of the total grade</i> To be held on 22 September 2016 Format to be decided later
End-Sem Exam	<i>Constitutes 50% of the total grade</i> To be held on 1 December 2016 Format to be decided later

STRUCTURE OF THE COURSE

- Part A *Review of basic material*
Mathematics and Computation
- Part B *Concept of Computation*
Algorithms and Numerical Methods
- Part C *Statistical Computation*
Programming in R and Python
- Part D *Foundations of Data Science*

Expected : 28 classes = 48 lecture hours + 8 hours for interaction

Everything is (or will be) on the CDS 2016 website.

Set up the programming environment

- Authenticate your laptop at CSSC, 4th floor, Library Building
- Install **R** and the IDE **RStudio** (<https://www.rstudio.com/>)
- Install **Python 2.7.x** and a nice text editor (*Sublime Text, Atom*)

Catch up on some background stuff

- Refresh your memory on basic topics in Discrete Mathematics
- Refresh your memory on basic topics in Vectors and Matrices
- Learn basic coding from “*Learn Python the Hard Way*” [[link](#)]

QUESTIONS?