Data Bootcamp: Syllabus

Revised: October 30, 2015

Rough draft.

Overview

Data Bootcamp is about nuts and bolts data analysis. You will learn about economic, financial, and business data, and enough about computer programming to work with it effectively. Applications include some or all of: leading economic indicators; emerging market country indicators; bond and equity returns; stock options; income by zip code; long tail sales data; innovation diffusion curves; and many others. We will use Python, a popular high-level computer language that's widely used in finance, consulting, technology, and other parts of the business world. "High-level" means it's less painful than most (the hard work is done by the language), but it's a serious language with extensive capabilities. "Data analysis" means primarily graphical descriptions that summarize the data in ways that are helpful to managers. "Bootcamp" is a reminder that expertise takes work. Don't worry, it's worth it.

Deliverables and grades

The first half of the course is an introduction to computer programming. We focus on those features of the Python programming language most useful to data analysis. The work is front loaded, with four assignments (best three count) and two quizzes (best one counts) in the first seven weeks. The logic behind this plan is to get everyone up to speed quickly by doing a little work all the time rather than lots of work once in a while.

The second half of the course is devoted to special topics and individual projects. Our goal here is for you to have a piece of work you can show potential employers to illustrate your skill set. We build up to a project in steps, starting with idea generation and ending with a professional piece of data collection and analysis.

Your final grade will be computed from

Assignments (best three of four)	30%
Quizzes (best one of two)	20%
Project	50%

Final grades are not subject to any fixed distribution. The number of A grades, for example, will depend only on your performance in the course. If you make a good-faith effort, we expect it to be hard to get less than a B.

More information

Look here:

https://github.com/DaveBackus/Data_Bootcamp#data-bootcamp.

Or email Dave Backus (db3@nyu.edu).

Policies

Ethics, disabilities, and many other things are governed by NYU and Stern policies. If you have questions about them, please ask.

On graded work: You may discuss assignments with anyone (in fact, we encourage it), but anything you submit, including your code, should be your own. Quizzes should be entirely your own work.

On disabilities: If you have a qualified disability that requires academic accommodation, please contact the Moses Center for Students with Disabilities (CSD, 212-998-4980) and ask them to send me a letter verifying your registration and outlining the accommodation they recommend. If you need to take an exam at the CSD, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be assured accommodation.