Intro to Social Science Data Analysis

Lecture 1: Introduction to the Course & R

Christopher Gandrud

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Contact

Christopher Gandrud

- ► Email: gandrud@yonsei.ac.kr
- ▶ Office Hours: 15:00-17:00 Wednesday (정208)
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What should you call me?

Please call me Chris or Christopher
In this course we respect **knowledge** & **evidence**, not titles.

- Learn how to take raw data, explore it, and present what you find.
- ► This course is hands on and practical. (If you want a mathmatical introduction to statistics, I recommend taking a coure in the Statistics department.)
- ► The skills taught in this course are important for many **real-world** situations:
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 - 2. Government
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 - R is difficult when you start to use it, but it is very powerfull and being able to use it is a very marketable skill.
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This course is useful.

Prerequisites

This course is intended for beginners.

- You should have good basic computer skills (Have used Microsoft Excel, for example.)
- You need to be curious: Why did that happen? How can I solve this problem?
- You need to be patient: Can't give up why you don't succeed the first time.

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- Data structures
- Gathering data
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Part II: Basic Data Analysis & Visualisation

- Descriptive statistics
- Data visualisation
- Overview of statistical inference
- ► Statistical inference with large samples

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Part III: Introduction to Linear Regression

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- ► Multiple linear regression
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Part IV: Introduction to Linear Regression

Research Projects:

Use all of these skills.

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Course Materials (1)

Blog: http://yonsei-data-analysis.tumblr.com/

Password Protected: YonseiData

Syllabus: http://bit.ly/QwE4UM

Course Materials (2)

Reading

The main **text** is: OpenIntro Statistics (first edition) It is **free** and can be downloaded here: http://www.openintro.org/stat/downloads.php.

You might also want to get: Crawley, Michael J. 2005. *Statistics: An Introduction Using R.* Chichester: John Wiley Sons. Ltd.

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Course Materials (3)

However, the course is more about **doing** than **consuming**. So the focus is on **completing tasks**, not reading.

To help you complete tasks, we are building a course **Wiki**: http://bit.ly/NkdgfW.

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Assessment (1)

▶ 10% Class Attendance and Participation

- ▶ 40% 5 Short Assignments: Due weeks 3, 5, 7, 9, 11
- ▶ 50% Pair Research project (paper and presentation): Due Week 16

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Assessment (2)

Attendance and Participation

You must attend all lectures and seminars.

You must participate in class discussions and activities.

▶ Each 1 + N absence = -5 participation points.

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Assessment (3)

More details will be given in future classes about the Short Assignments & Research Project

► 1. Look at the course blog (http://yonsei-data-analysis.tumblr.com/)

Please post!

▶ 2. Install R if you want to use your own computer. (RECOMMENDED)

You can find instructions on the course wiki page: http://bit.ly/PBjDdw

▶ 3. Open and play around with RStudio

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