Syllabus | Data-driven reporting, Fall 2017

This syllabus is for the Fall 2017 data reporting classes at the University of Texas at Austin. Undergraduate and graduate sections are concurrent.

J 327D REPORTING WITH DATA	Day	Time	Location
	MW	6:00 - 7:30	CMA 4.146
J 395 45-DATA VISUALIZATION	Day	Time	Location
	MW	6:00 - 7:30	CMA 4.146

Prerequisite
Graduate standing or upper-division standing and Journalism 310F (or 320D) with a grade of at least B-.

Description
This course will teach you basic skills to use data analysis and visualizations for news reporting. Students will learn how to request data from public and governmental sources, to clean up and analyze that data using tools such as Excel and Tableau, and use simple statistical models to accurately report based on the data.

Objectives
- Learn how to request and negotiate for electronic data from government agencies and other sources.
- Learn about and use common governmental data clearinghouses from local, state and national sources.
- Learn to clean up existing data and organize primary data to prepare for analysis.
- Learn how to use spreadsheet and data visualization software to analyze data.
- Learn to use patterns and "answers" from data to create data review reports, source lists and fully-reported stories.
- Learn how to use statistical models to define and contextualize data in news reporting.

Instructor
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Office hours directly following class or upon request. I may not check my university email during the day as I have a day job. If you need to reach me in a hurry, text me.

Resources

IRE Membership

I recommend that students join Investigative Reporters & Editors. Price is $25/year for students, but with that membership, you get, among other things:

- 1-year Premium subscription to CometDocs, a $70 value.
- 1-year Tableau Desktop license. This software typically costs $1000.

There are freemium versions of both software applications, but having the real deal helps.

Required texts

- Data Points by Nathan Yau. (**~40**). Should also be in the book store.
- Finding Stories with Spreadsheets by Paul Bradshaw (**~$20**). If you think you might be interested in some simple data scraping techniques, consider the bundle that also includes Scraping for Journalists, but that is not required. (There is also a bundle with a third book, Data Journalism Heist, but that book is outdated.)
- Numbers in the Newsroom by Sarah Cohen (**$15** with discount code IREmember2017.)
- Data Journalism Handbook (Free).
- Other online readings, as assigned.

Readings are sometimes due before a specific lecture, but most are due in conjunction with a quiz. These are outlined in Canvas.

Software

In the UT Catalog, the School of Journalism strongly encourages students to have a laptop capable of running Microsoft office and Adobe Creative Suite. You are encouraged (implored, even) to use your own computer during this class. If you are limited to the lab, you will be at a disadvantage as you will have homework that requires a computer. All software used is available on both Macs & PCs, but know I will be using a Mac to demonstrate these skills.

- Microsoft Office, the most recent version. We'll be using Excel in class, which will be on the computers in the lab. But if you don't have Office on your personal computer already, you really ought to buy it from the UT Campus Computer Store. If you have an older version of Office, go ahead and spend the $20 to get the most recent one. You'll never find it cheaper again. You can probably do everything with free Libreoffice or Google Spreadsheets, but I'll be using Excel.
- We'll be using other software tools for assignments. These are typically free for the level we are using them or I have acquired educational licences.

Course outline

I will adjust this class based on progress, so the outline below is a general guide. See the course in Canvas for a full outline of assignments and readings.

Week	Description
1	Introduction

2	The data journalism workflow and process
3	Data acquisition and Excel skills: Sort, filter, formulas
4	Excel skills: Sort, filter, formulas, pivot tables and charting
5	Using the Census
6	Cleaning data: Regex and Refine
7	Reporting progress on data acquisition
8	Introduction to Tableau
9	Exploring data with Tableau
10	What makes a good chart/interactive
11	Putting it all together: raw data to story and charts
12	Putting it all together: raw data to story and charts
13	Demos & Final Project Labs
14	Demos & Final Project Labs
15	Demos & Final Project Labs
16	Final Presentations

Grading

- (10%) **Participation***: Students are expected to come to class and participate in discussions and in-class assignments. This is a lab-centric course where skills are covered at a computer with instructor supervision, and each class builds upon the previous, so if you miss a class you will fall behind. If you must miss a class, tell me in advance, or I can't help you. Attendance in class is a part of your grade.
- (30%) **Quizzes**: Quizzes will include material from assigned readings, lectures and work done in class.
- (30%) **Assignments**: Some assignments are done in class, but others require out-of-class time to complete.
- (30%) **Final project**: This project will include a fully-reported story with at least three sources based on pre-approved data sets obtained by the students. The process will include a pitch, analysis, data report and visualization. If you fail the final, you will not receive an A no matter the math on your other grades. This project is due May 3, 2015.

*By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Graduate credit

This class is cross-listed for graduate students. Those students will have additional assignments and have more rigor applied others.

Quantitative reasoning flag
This course carries the [Quantitative Reasoning flag](#) for undergraduates. Quantitative Reasoning courses are designed to equip you with skills that are necessary for understanding the types of quantitative arguments you will regularly encounter in your adult and professional life. You should therefore expect a substantial portion of your grade to come from your use of quantitative skills to analyze real-world problems.

Grading scale
The grading scale for the course will be as follows:
- A: 94-100
- A-minus: 90-93.99
- B-plus: 87-89.99
- B: 84-86.99
- B-minus: 80-83.99
- C-plus: 77-79.99
- C: 74-76.99
- C-minus: 70-73.99
- Anything below a 70 is failing.

About academic dishonesty
- Plagiarizing or using someone else's material, another media source, student work or even yourself and representing it as new for this class. You can't turn in a story or media project from a previous class without the instructor's prior permission.
- Making up quotes, sources and facts.
- Not interviewing people who appear in your stories.
- Not giving appropriate attribution or citation of a source or background information.
- Cheating during a quiz or an assignment.

Moody writing center
The [Moody College Writing Support Program](#), located in BMC 3.322, offers one-on-one assistance without charge to undergraduates seeking to improve their professional writing in all fields of communication. We have student specialists in Journalism, RTF, CSD, CMS, Communication & Leadership and PR & Advertising. In addition, we offer workshops to strengthen core writing skills in each field and to inspire students to strive for excellence. Students may guarantee their time by booking half-hour appointments on our website for assistance during all stages of the writing process. Writing coaches also will take drop-ins if they are not working with appointments.

More important stuff

- Obey the honor code.
- Stay safe. Campus security and emergencies.
- The University of Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 512-471-6259, 512-471-6441 TTY, http://diversity.utexas.edu/disability/about/
- More University policies and places to get help.