

You'll also do a variety of short graded homework assignments designed to further your skills. In addition, there will be two longer assignments: A report describing the details of a useful government data source, and finally a "memo to your editor" proposing a data story based on your preliminary analysis of some interesting dataset. More details will be given to you during the semester.

Required materials:

- **Access to a computer with Microsoft Excel:** Ideally, this class would be taught in a computer lab, but that couldn't be scheduled. Second best will be having you bring your own laptop to class to do exercises here. At the very least, you'll need to find a computer with Excel (or other spreadsheet software) to do homework exercises.
- **Readings:** There is no required textbook for this course, but I will give you a number of printouts or readings from the web for you to do as assigned. A first such assignment will be for you to download "The Data Journalism Handbook" from <http://datajournalismhandbook.org/>; it is free. A number of other readings are in the attached list; many are handouts that I will give you.
- **Listservs:** You will subscribe (free) to two data journalism email lists:
 - a. **NICAR-L:** To subscribe to this list run by Investigative Reporters & Editors, go to <https://www.ire.org/resource-center/listservs/subscribe-nicar-l/>
 - b. **Data Driven Journalism:** To subscribe to this list run by the European Journalism Centre, go to <http://datadrivenjournalism.net/maillinglist>.

Grade: Your grade will be based on the following elements:

- Quizzes and non-lab exercises (10%): There will be occasional open-book quizzes on Excel or perhaps on current postings/discussions in NICAR-L or DDJ.
- Statistics quizzes (25%): In most classes, I will lecture on statistical concepts and tools. After each statistics segment, you will do a short open-notes homework exercise that will be graded.
- Report on a recently published data journalism project (15%): Each class, one or two of you will give the class an oral (5 minutes) and written (two-page double-spaced) report describing a significant journalism project that used computer-assisted reporting. I will give you a handout with more details soon.
- Public data description project (20%): I will assign each of you a good data site to explore and then write a 2-3 page description of the kind of data it has and other details I will specify in an assignment sheet I will give you.
- Data analysis project (20%): Using a database of your choosing (with my approval), you will do a data analysis project that will culminate in a 4-5 page project memo, plus documentation, pitching what you found as a story idea. Later in the semester, I will give you a handout with more details about this.
- Final exam: There will be a final during the January exam period that will be worth 10% of your grade.

Make-up Work: The unexpected does happen. When it does, I will accept make-up work for full credit, including any exercises and quizzes, if you can convince me there was a non-frivolous reason for missing your deadline. Obviously, it will get harder to convince me if there are multiple occasions.

Hashtag: If you are a Twitter user and want to post something of interest to other class members, use **#doigdata**.

News media: You are expected to read a good newspaper or news website every day. Look particularly for stories using data journalism -- or, even better, where it should have been used.

Schedule: The schedule at the end of the document is subject to revision as I see necessary, depending on our progress, the possibility of guest speakers and other factors.

SUGGESTED READINGS

- <http://datajournalismhandbook.org/>
- <http://towcenter.org/wp-content/uploads/2014/05/Tow-Center-Data-Driven-Journalism.pdf>
- <http://www.holovaty.com/writing/fundamental-change/>
- <http://www.niemanlab.org/2014/07/alberto-cairo-data-journalism-needs-to-up-its-own-standards/>
- <http://www.niemanlab.org/2012/05/how-la-nacion-is-using-data-to-challenge-a-foia-free-culture/>

SOME GOOD PUBLIC DATA SOURCES

- Czech National Statistics office: <https://www.czso.cz/csu/czso/home>
- EU statistics: <http://ec.europa.eu/eurostat>
- Public records in Europe: <http://www.wobbing.eu/>

Class date	Lecture Subject	Details	Newsroom Statistics	READINGS
9/22/16	Introduction to Data Journalism	Intro self and students; discuss the syllabus; history of data journalism		Introduction chapter of "Data Journalism Handbook" (http://bit.ly/1NDfBg6); Chapter 1 of Precision Journalism (handout)
9/29/16	Getting Data	Public records; paper vs. digital; tour of good data resources	Newsroom Math	informaciprotikorupci_1str open records.pdf; "Wobbing works" (http://bit.ly/29hvrR0)
10/6/16	Spreadsheets	Intro to Excel as the main tool for data journalism; Importing data; Sorting; Filtering; Creating new variables with functions	Univariate statistics	Excel tutorial for EJC.pdf (handout)
10/13/16	Spreadsheet pivot tables and more	Summarizing categorical data with pivot tables	Surveys and sampling	covering polls.pdf; 20 questions to ask about polls.pdf (handouts)
10/20/16	Basic data visualization	Making charts with Google Fusion Tables and Datawrapper	Basic data chart types	Functional Art (http://bit.ly/1ceyguB); Data viz tools (http://bit.ly/29EXxvB); finding the right chart.docx (handout)
10/27/16	Database programs and Open Refine	Merging tables to create new information; Cleaning data with Open Refine	Correlation	Cleaning data with Open Refine (http://bit.ly/29fTsdE)
11/3/16	Dot maps	Making maps with Google Fusion Tables	Relationships that deceive	Mapping with Google Fusion Tables (http://bit.ly/29nnUU8)
11/10/16	Choropleth maps	More Fusion Tables	Categorical Relationships	Mapping with Google Fusion Tables (http://bit.ly/29nnUU8)
11/17/16	NO CLASS -- "Students Fight for Freedom" Day			
11/24/16	Basic web scraping	Using Excel to get data from websites	Linear Regression	web scraping without coding.pdf and web scraping without codings.pdf (handouts)
12/1/16	Tableau Public for data graphics	Making charts and maps with Tableau Public	Probability	https://public.tableau.com/s/blog/2014/02/tableau-data-journalism-round
12/8/16	Work on data projects			
12/15/16	Present data projects			