



GEORGETOWN UNIVERSITY  
School of Continuing Studies  
Journalism

## MPJO-722-01: DATA REPORTING

GEORGETOWN UNIVERSITY: MPS-JOURNALISM

Wednesdays, 8 p.m. to 10:30 p.m. | Spring 2016

Instructor: Steven Rich

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### COURSE OBJECTIVES

The world that we live in and report on is increasingly influenced by data. This course will help you use data to find and develop stories that can't be found in other ways. Data can be anything: spreadsheets full of numbers, the text of speeches or the measured observations of daily life. Reporters need to be able to treat data as another source to be researched, interviewed and analyzed, using the right tool for the job. Beginning with spreadsheets and continuing to databases, basic mapping and rudimentary programming, this class will make working with data a part of your skill set.

This is a skills-based course, so students will need to be comfortable with learning to use computer software beyond word processors. If you are wondering if you can do this stuff, you can. You may prefer interviewing people to data, but avoiding data - particularly for Washington journalists - is no longer an option.

### REQUIRED READING

There are no textbooks for this course. We will have weekly readings chosen from professional data work, government documents, blog posts and other sources. Students will be expected to discuss these readings in class.

### CLASSROOM ETIQUETTE

Students should turn off all cell phones, pagers or other communication devices while in class. Class discussions should be respectful and considerate of others' views and opinions.

In the event of a weather emergency (or any other widespread emergency) that closes the Georgetown Downtown building, we will plan to meet virtually via online videoconferencing tools. More information will be provided on how this will work later in the semester.

### GRADING

Each student's final grade will be determined by six factors described below. While I will communicate any concerns that I have about individual performance, please do not hesitate to contact me with questions about grading or general performance.

Graduate course grades include A, A-, B+, B, B-, C and F. **There are no grades of C+, C- or D.**

A	100-93
A-	92.99-90



B+	89.99-88
B	87.99-83
B-	82.99-80
C	79.99-70
F	69.99-0

The instructor will provide a warning by mid-semester to any student who appears to be on track for a poor final grade.

## ASSIGNMENTS

### **In-class and homework assignments:**

Students will be required to complete exercises involving the use of spreadsheets, databases and other tools both during class and outside of class. It is your responsibility to find computer time for the outside assignments. All assignments are to be handed in at the beginning of each class or can be emailed before class. Late work will be penalized on a sliding scale (the later the assignment, the larger the penalty). A good rule: don't come to class empty-handed – at the very least, show me that you attempted the assignment. Together these assignments constitute 25 percent of each student's grade.

### **Written critiques:**

Each student will complete two written critiques of professional work that makes extensive use of government data. While you may not be able to replicate the reporters' work, try to put yourself in their shoes and judge the decisions they made. Think of these as mini-book reviews, although I expect between 500-750 words for each. Combined, these critiques make up 15 percent of each student's grade.

### **Mid-term:**

Each student will be responsible for obtaining, analyzing and visualizing a federal government data set assigned to him/her, using methods we'll cover in class. This assignment constitutes 15 percent of each student's grade.

### **Story Memo:**

Students will obtain and analyze federal government data and write a story memo about their findings, rather than writing an actual story. The emphasis is on the process more than the final product, although the memo should reflect the depth of your work. While some in-class project time will be provided, prepare to spend significant time outside class working on this assignment. Each student will be required to hand in a well-written memo describing in detail the work done on the project and the handling of the underlying data. The memo should also address any weaknesses in the data or unexpected events that hampered or improved the process. This project will make up 25 percent of each student's grade.

### **Data Assessment:**

Each student will, as part of the story memo project, undertake a study of the data offerings of the agency that produced the data set used for the story memo. This study will result in a short



paper assessing the scope, quality and accessibility of the agency's data, how it has been used by journalists and how it could be used. The paper should also identify opportunities for agencies to release or organize data of public interest. This paper constitutes 10 percent of each student's grade.

### ATTENDANCE AND PARTICIPATION:

Journalism is not a passive activity and requires focus, inquisition and involvement. We will be discussing professional work, writings and data issues every week, and I expect your comments, questions and other contributions to our class. None of this can happen if you don't show up. If you must miss a class, please try to let the instructor know in advance. You will be responsible for any work you miss. Participation in the course constitutes 10 percent of each student's grade.

### COURSE OUTLINE:

**Week One** 1/20/16 – Course Introduction; Intro to Data; Excel Skills  
**Week Two** 1/27/16 – Unstructured data; Text Visualization; Basic visualizations  
**Week Three** 2/3/16 – How not to use data; Playing with unfamiliar data; Basic Excel formulas  
**Week Four** 2/10/16 – More Excel formulas; Summarizing with Excel  
**Week Five** 2/17/16 – Database Skills – Importing and querying; Census data  
**Week Six** 2/24/16 – Database Skills – Summarizing Data; More Census data  
**Week Seven** 3/2/16 – SQL Joins; College Athletics data  
**Week Eight** 3/16/16 – SQL Wrap-up; Cleaning dirty data  
**Week Nine** 3/23/16 – Charting; Mapping; Fusion Tables  
**Week Ten** 3/30/16 – Working with PDFs; Military data  
**Week Eleven** 4/6/16 – Writing with Data; Structured Web Data; Intro to Web Scraping  
**Week Twelve** 4/13/16 – Basic Web Visualization Tools; Police Shootings data  
**Week Thirteen** 4/20/16 – How the Internet Works; Version Control  
**Week Fourteen** 4/27/16 – Odds and Ends  
**Week Fifteen** 5/11/16 – Story Memo Presentations; Wrap-up

### UNIVERSITY RESOURCES

Georgetown offers a variety of support systems for students that can be accessed on main campus or at the downtown location:

- MPS Writing Resource Program  
202-687-4246  
<http://writingcenter.georgetown.edu/>
- Academic Resource Center  
202-687-8354 | [arc@georgetown.edu](mailto:arc@georgetown.edu)  
<http://ldss.georgetown.edu/>
- Counseling and Psychiatric Services  
202-687-6985  
<http://caps.georgetown.edu/>



## STUDENTS WITH DISABILITIES POLICY

Students with documented disabilities have the right to specific accommodations that do not fundamentally alter the nature of the course. Students with disabilities should contact the Academic Resource Center (202-687-8354; [arc@georgetown.edu](mailto:arc@georgetown.edu); <http://ldss.georgetown.edu/index.cfm>) before the start of classes to allow time to review the documentation and make recommendations for appropriate accommodations. If accommodations are recommended, you will be given a letter from ARC to share with your professors. You are personally responsible for completing this process officially and in a timely manner. Neither accommodations nor exceptions to policies can be permitted to students who have not completed this process in advance.

## GEORGETOWN HONOR SYSTEM

All students are expected to maintain the highest standards of academic and personal integrity in pursuit of their education at Georgetown. Academic dishonesty in any form is a serious offense, and students found in violation are subject to academic penalties that include, but are not limited to, failure of the course, termination from the program, and revocation of degrees already conferred. All students are held to the Honor Code. The Honor Code pledge follows:

*In the pursuit of the high ideals and rigorous standards of academic life, I commit myself to respect and uphold the Georgetown University Honor System: To be honest in any academic endeavor, and To conduct myself honorably, as a responsible member of the Georgetown community, as we live and work together.*

## PLAGIARISM

Stealing someone else's work is a terminal offense in journalism, and it will wreck your career in academia, too. Students are expected to work with integrity and honesty in all their assignments. The Georgetown University Honor System defines plagiarism as "the act of passing off as one's own the ideas or writings of another." More guidance is available through the Gervase Programs at <http://gervaseprograms.georgetown.edu/honor/system/53377.html>. If you have any doubts about plagiarism, paraphrasing and the need to credit, check out <http://www.plagiarism.org>.

## SYLLABUS MODIFICATION

The syllabus may change to accommodate discussion of emerging topics. Also, the schedules of guest speakers may require some shifting of our agenda. The instructor will make every effort to provide as much advance notice as possible for any alterations.