**MCO510**

**Graduate Data Journalism**

**Fall Semester 2016**

**Instructor:** Evan Wyloge **Hours:** 2:00 p.m. - 3:50 p.m.

**Office:** 406D **Days:** Tues/Thurs

**Phone:** 928-863-1191 **Classroom:** Cronkite 351

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**Office hours:** Tues/Thurs 1:30 p.m. - 2:00 p.m., 4:00 p.m. - 4:45 p.m.

**Course Description:** Through most of the history of journalism, reporters who wanted to examine difficult social problems had to rely on studies done by government or academics. But today’s computer and communications revolution has given reporters the power to do their own original studies of complicated questions. This kind of investigative reporting might be considered social science done on deadline, allowing you to inform your readers and viewers on issues ranging from the performance of public authorities to inequality in this diverse society.

In this course, you’ll learn to use computer spreadsheets, database software, mapping programs and statistical techniques to examine public records in ways that would be impossible for reporters who rely only on their eyes and attention span. You’ll also learn to use the Internet and other online sources to find information and sources for your stories. And you’ll learn to negotiate with government officials for public records.

We’ll explore how these tools can be used across a wide variety of beats. Often we’ll take a specific beat (cops, city hall, education, demographics, elections, sports, business, government regulation, etc.) and discuss the kinds of data you might use in stories covering that beat. Also, we’ll look at some good sources of that data, whether from government agencies or on the Internet. Then you’ll do some sort of in-lab live data exercise concerning that beat.

This will expose you to a wide range of the kinds of data and stories you’ll tackle someday as reporters: Public school test results, gun deaths, racial discrimination in mortgage approvals, campaign contributions, racial and ethnic demographic change, air quality, gender equity in college sports, municipal budgets, crime rates, property taxes, weather, election results, etc.

During the semester, you’ll also do a variety of homework assignments as detailed below. A key assignment, to be detailed in a separate handout, will be acquiring public data and then analyzing it as a preliminary step toward doing a data-based story data during your coming capstone semester in one of the Cronkite News bureaus.

**Course Prerequisites:**  Successful completion of MCO 502 Graduate News Writing and Reporting

**Required Membership**: You must join Investigative Reporter & Editors (IRE). A student membership is $25 a year. Frequently we will use readings, data and exercises taken from the IRE website, some of which is available only to members. To join IRE, go to **www.ire.org** and follow the “join” link on the top of the page.

**Required Readings:**

* “Data Journalism Handbook” from <http://datajournalismhandbook.org/>. It costs $21 as an e-book, $27 for a print edition from O’Reilly or is **free** as a Web document.
* Guide to Arizona public records laws at **http://www.rcfp.org/open-government-guide.**  Read all the sections on “Open Records” in the Arizona section; good idea to read the “Open Meetings” section, too.
* **NICAR-L daily postings**: Go to **http://www.ire.org/resource-center/listservs/subscribe-nicar-l/** to sign up (it’s free.)

**Optional Readings (all strongly recommended):**

* *The Investigative Reporter’s Handbook: A Guide to Documents, Databases and Techniques (5th Ed.)*, by Brant Houston and IRE.
* *Innumeracy,* by John Allen Paulos
* *A Mathematician Reads the Newspaper,* by John Allen Paulos
* *Numbers in the Newsroom,* by Sarah Cohen
* *Precision Journalism (4th ed.)* by Phil Meyer

During the semester I’ll suggest other books and reference materials that might be useful to you, as well.

Also, if you aren’t already very familiar with Excel (and I don’t expect you to be yet), you might bookmark one of the Excel tutorial sites like **http://multimedia.journalism.berkeley.edu/tutorials/spreadsheets/**. In addition, a loose-leaf binder will help you keep class handouts. And you may want a flash drive or access to cloud storage to save your work in class.

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

* Statistics quizzes & tests (20%): Most class sessions will include a short lecture, covering various statistical concepts and tools. There will be an open-notes quiz that will be graded following each statistics lesson. There also will be a midterm and final on the statistics lessons.
* Skills & readings exercises: (10%): There will be occasional open-book exercises and quizzes on readings, Arizona public records laws, Excel, Access, and perhaps on current postings/discussions in NICAR-L. They will be assigned as an in-class assignment or a take-home assignment. There also will be an online research exercise about the background of a person I select. This is basically all non-statistics exercises in the class.
* Report on a recently published CAR project (15%): At a later class session, I'll assign you to read through a significant journalism project that used data journalism techniques. You will write a 2-3 page precis of the report which will be shared with the class. There will be a handout with more details soon.
* Database acquisition project (20%): Over the course of the first half of the semester, you will identify and negotiate to acquire a database from a local/state public agency. Success will not depend on getting the data; instead, what counts will be evidence of your thoroughness and persistence. This assignment will include a two-page report on the process, plus documentation. I will give you a handout next week giving you more details about this.
* Data analysis project (25%): Using the database gathered above or another of your choosing, you will do a database analysis project that culminates in a 3-5 page "pitch" memo, plus documentation. A significant goal of this class is to prepare you for doing a data story in your professional program capstone; this project should give you a good running start at that. I will give you a handout with more details about this next week.
* At-home essays/Skills tests (10%): Four times during the semester, you will be given an assignment that will be timed, and which will utilize skills from class. As an example, these could take the form of data analysis of a provided data set, critical analysis of a recent piece of data journalism, an essay exploring public records laws, an online learning module that expands on a technical skill learned in class, or any other exercise that further integrates the class competencies.

**Attendance and Makeup Work:** Students are expected to be in every class and to arrive on time. There are no excused absences or lateness. Makeup work will be not be given; if you miss an in-class assignment, quiz or test, you will receive a zero.

Students may miss two classes without additional penalties. Students who miss more than two classes will see their final grade drop by half a grade (a B+ would become a B-, for example) for each additional absence.

**Deadlines:** Since this is a journalism class, deadlines are important, and you are expected to meet them. Assignments submitted even one minute past the deadline will not be accepted; they will receive a zero.

**Class etiquette:** You are expected to pay attention during class – no emailing, instant messaging or checking sports scores or your Facebook popularity. Be respectful of your instructor, guests and classmates.

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

**News media:** You are expected to read The Arizona Republicevery day. It' would be a good idea to read The New York Times as well. Look particularly for stories that use data journalism – or, even better, where it should have been used.

**Exams:** There will be no comprehensive midterm or final. As noted above, there will be a short-answer midterm and a final on the statistics lessons.

**Accommodations for disability:** If you have a disability that may affect your work in this course, or otherwise have medical information you think I need to know, please inform me privately as soon as possible. If you request special accommodations for this, you need to be registered with ASU’s Disability Resource Center.

**Cronkite School Academic Integrity Policy:** The school has a zero tolerance policy toward academic dishonesty, enforced within every course and educational activity offered or sanctioned by the school. Any allegation of academic dishonesty will be referred to the school’s Standards Committee for review and recommendation to the dean of the school. If any student is found to have engaged in academic dishonesty in any form – including but not limited to cheating, plagiarizing and fabricating – that student shall receive a grade of XE for the class and will be dismissed from the school. There will be no exceptions.

At the beginning of every Cronkite class, each student will be given a copy of the full academic integrity policy, along with accompanying information on plagiarism. Students must sign a pledge that indicates they have read and understood the material and agree to abide by the policy.

The policy, along with guidance on how to avoid plagiarism and fabrication, can be found at http://cronkite.asu.edu/assets/pdf/Academic\_Integrity\_Policy.pdf.

**Diversity Principles:** The Walter Cronkite School of Journalism and Mass Communication practices inclusivity in student, staff and faculty populations in order to create an academic environment that embraces diversity of thought and acceptance of all people regardless of race, gender, age, sexual orientation or societal, political, cultural, economic, spiritual or physical differences.

To this end, the school directs efforts to the following four principles:

* Actively seek out and encourage diverse populations to become productive members of the faculty, staff and the student body.
* Create and maintain a work, learning and social environment that is cognizant and supportive of a diversity of human differences and beliefs.
* Incorporate within the formal content of the curriculum and in each course an affirmation of the core journalistic values of accuracy, fairness, ethical behavior and sensitivity when reflecting an increasingly multicultural world.
* Foster and support a climate in which events and activities of the school reflect diversity of awareness, sensitivity to and support for people of different origins, orientations and abilities.

**ACEJMC Values and Competencies:** As a member of the Accrediting Council on Education in Journalism and Mass Communication, the Cronkite School is committed to classroom learning that achieves ACEJMC professional values and competencies. These include the core areas of freedom of speech, ethics, diversity, critical thinking, research, writing and use of tools and technologies related to the field. For a full list of ACEJMC values and competencies, see http://www2.ku.edu/~acejmc/PROGRAM/PRINCIPLES.SHTML#vals&comps

**Religious accommodations**: If you need to be absent from class due to a religious observance, notify your instructor at the beginning of the semester.

**Sexual Violence or Harassment:** Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity.  Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited.  An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university.  If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/>

**Building Hours:** The Cronkite building is open from7 a.m. to midnight, Mondays through Thursdays; 7 a.m. to 6 p.m. on Fridays; and noon to 9 p.m. on Saturdays and Sundays.

In addition, the Student Resources Center, with work tables and computer stations, is accessible to all students on a 24/7 basis beginning with the start of the semester. No technology support is available during these off hours. The resource center is on the second floor of the building adjacent to the First Amendment Forum, which also will be open after hours. To access the building, students may use their student ID cards at the card reader outside the front entry, then sign in with security.

**Collaborations**: All in-class and out-of-class assignments must be your own work – from concept to execution, unless some type of collaboration is specified by the instructor. Even in those cases where students are assigned to teams, not all elements of the assignment may be team-based. For instance, the assignment may call for a team discussion of a topic, but a writing assignment based on the discussion must be your individual work.

**Acknowledgements:** As you’ll see from the NICAR-L list, journalists who do data journalism have a strong tradition of helping each other. I’ve been helped greatly in designing and modifying this course by ideas from other journalists and teachers, including Steve Doig of the Cronkite School, Ira Chinoy of the University of Maryland, David Herzog of the University of Missouri, Brant Houston of the University of Illinois, Bill Dedman of Newsday, Sarah Cohen of the New York Times, Dan Keating of the Washington Post, Ryan Konig and Ron Hansen of the Arizona Republic, Matt Dempsey of the Houston Chronicle, and generally by the staff and members of IRE.