Journalism 5155--Database Reporting

3 credits
Spring semester

Instructor: MaryJo Webster
Contact information: The best way to reach me outside of class is via email, unless it’s urgent.
Phone: 651-491-6576 (cell). Please don't call after 9:30 p.m.
Email: mjwebste@umn.edu
Office Hours: By appointment
I will be available at the conclusion of each class, or just before the start. Contact me in advance via email or phone to ensure that you get first dibs on my time. We could also schedule a phone consultation if necessary.

Class Meets: Tuesdays-Thursdays, 8:15 am to 9:30 am
Location: Murphy Hall Room 10-S

COURSE OVERVIEW:
JOUR 5155 (Database Reporting) is a skills-based, capstone course designed to enhance reporting skills, primarily by identifying and analyzing electronic data to look for patterns and trends that can lead to in-depth news stories. Students will obtain and analyze digital data for reporting that can be published on various media platforms. They will use spreadsheets and databases to manage information, find news stories, and produce visualizations that complement those stories.

COURSE WEBSITE:
Access the Moodle site via MyU Portal – http://myu.umn.edu 
For help call the computer helpline at 612-301-4357 (1-HELP)
Other materials: http://mjwebster.github.io/DataJ/

COURSE GOALS:
● Make data requests using public records law
● Use spreadsheets and database managers to organize and analyze large amounts of information
● Build a dataset when one does not already exist
● Find patterns and trends in data and develop those into story ideas
● Produce clear and engaging news stories grounded in that data analysis
● Use numbers effectively and accurately in stories
● Create visualizations to complement news stories and convey data in effective ways.

CLASS PROCEDURES:
Most class sessions will involve hands-on learning, either working together, in small groups or as individuals to analyze data using various types of software and to work through the typical questions and problems that you encounter while doing data journalism.
We will produce a series of short data-driven stories — either in class or as assignments — that we will pitch to the Minnesota Daily for publication.

There will be weekly quizzes, largely based on reading assignments or as a means of testing you on how to use a particular piece of software or how to navigate common data journalism problems.

Outside of class you will need to complete: required readings, hands-on lessons via Lynda.com, data analysis exercises and reporting/writing for some of the short data-driven stories.

**Skills we will cover:**

- #1 most important thing: How to ask a dataset questions. This includes the conceptual process of coming up with the questions, then translating them into whatever software you are using and then interpreting the results.
- Data analysis techniques in Microsoft Excel such as mathematical formulas and PivotTables; importing data, data cleanup, merging datasets and restructuring; data visualizations using charting tool. This class assumes that you have a solid grounding in this software, however there will be plenty of outside class opportunities to catch up or refresh your skills, if necessary.
- Data analysis techniques in database manager software (such as Microsoft Access or SQLite), including running basic queries that filter a dataset; running summary queries that find patterns and trends; merging two or more data tables; importing and exporting data; data cleanup and adding to data tables using update and insert queries.
- Basic data analysis techniques using a Geographic Information Systems (GIS) software (we’re going to use a free one called QGIS)
- Best practices for working with data (regardless of software), including how to structure datasets; how to look for flaws/problems; using numbers and statistics correctly; how to verify/support your results.
- How to find and request data. Best practices for ensuring you get the data that best serves your needs. How to write a good Data Practices Act or FOIA request letter.
- How to standardize or “clean” data using various tools, including OpenRefine.
- Data visualization best practices and introduction to some commonly available and easy-to-use tools, such as Tableau Public, DataWrapper and CartoDB.

**REQUIRED READING MATERIALS:**

- [Data Journalism Handbook](http://datajournalismhandbook.org), (free online)
- Other materials provided by instructor, [http://mjwebster.github.io/DataJ/](http://mjwebster.github.io/DataJ/)

**SUGGESTED RESOURCES:**

- [School of Data tutorials](http://www.schoolofdata.org)
- [DataJournalism.net](#): This website has copious resources and helps give the big picture about how data is being used in journalism around the world.
- [Global Investigative Journalism data resources](#)
- [Smalldatajournalism.com](#) -- This is a list of readings that another data journalism instructor recommends; it's a very lengthy list but lots of good stuff.
- [Scraping for Journalists](#)

ATTENDANCE & PARTICIPATION:

Attendance and participation are the most important aspects of this class. Learning data journalism is a sequential process. If you miss one step, you'll have a hard time catching up with the class on the next step.

Participation is important because asking questions is what we do as journalists. You'll be expected to do that when you have a job, so it's a good time to start practicing.

If you must arrive late or leave early, please do so in the least disruptive manner possible (sit in an aisle seat near the door). You will be asked to leave if you are talking, reading the newspaper or sleeping because those behaviors disrupt the learning environment. Please understand, this is not meant to embarrass or humiliate, only to make a more positive learning experience for everyone else.

Notify the instructor in advance, via email or phone, if you are unable to attend class (emergencies excepted). Absence due to an illness requires a doctor's note in order for it to be deemed an excused absence, according to University policy. Missed work as a result of an excused absence can be made up within a reasonable amount of time, as decided by the instructor based on the circumstances.

KEY POINTS:

- **Please try to be in the classroom by 8:10 a.m. in order to have time to start your computer and get logged in before the start of class.**
- **No food or drink in the lab.**
- **Deadlines are important in this business and this class is no exception. All assignments must be turned in at the due date and time noted in Moodle. You'll be marked down one grade for handing in an assignment after the deadline, two grades if more than 1 day later. Some flexibility is possible, but only if you talk to me before the deadline and have a legitimate excuse.**
- **Ask a lot of questions and feel free to offer up comments, suggestions, ideas, etc. at any time. All sessions of this class should be considered open discussion forums.**
MOBILE DEVICE POLICY
No mobile devices may be used during class time. Mobile phones and tablets should be shut off before entering the classroom and should never be checked during class time.

COMPUTERS/SOFTWARE:
The lab computers are here for you to use, however all of our work will be done outside the network so it would be feasible for you to bring your own Windows-based laptop to use in class, if you wish. We will be working on the Windows platform, however, so it’s imperative that you can do the same on your laptop.

We will be using Microsoft Excel, Microsoft Access, Google Fusion Tables, Open Refine, Tableau Public.

PLEASE NOTE: Access is not available for Macs.

All of the readings, plus some other materials that we'll be using in class and for assignments will be located on my Github web page: http://mjwebster.github.io/DataJ/

We'll use Dropbox to store data and various materials. The instructor will provide you with access to a Dropbox folder. You will not need to set up your own account, nor spend any money to use this.

Moodle will be used for keeping a schedule of upcoming course sessions (but, as I noted above, this schedule may only be filled out for a week or two out). You’ll also use Moodle for uploading assignments, tracking your attendance and your grades.

If you’re not familiar with Moodle or Dropbox, please let the instructor know. If, at any point, you have difficulty uploading an assignment to Moodle, you can email it to me as a last resort.

GRADING:
Your final grade will be based on the percentage of the total points you accumulate throughout the semester.

Your final grade will be determined as follows:
93-100% = A
90-92% = A-
87-89% = B+
83-86% = B
80-82% = B-
77-79%=C+
73-76% = C
70-72% = C-
60-69%=D
<60% = F

A - Achievement that is outstanding relative to the level necessary to meet course requirements.
B - Achievement that is significantly above the level necessary to meet course requirements.
C - Achievement that meets course requirements in every respect.
D - Achievement that is worthy of credit even though it fails to meet fully the course requirements.
F - Represents failure and signifies that the work was either completed but at a level of achievement that is not worthy of credit or was not completed.
I (Incomplete) - assigned at the discretion of the instructor. An incomplete grade will be considered only when documented, extraordinary circumstances beyond control, or ability to anticipate, prohibit timely completion of the course requirements. Incomplete grades are rare and require a written agreement between instructor and student.

COURSE GRADE CHANGES
Questions about course grade changes should be directed to your instructor; or you may contact the Student Conflict Resolution Center at 612-624-7272 for assistance. Grade changes will be made only when there is evidence of an error in grading and/or recording of a grade.

WORKLOAD POLICY
For undergraduate courses, one credit is defined as equivalent to an average of three hours of learning effort per week (over a full semester) necessary for an average student to achieve an average grade in the course. For example, a student taking a three credit course that meets for three hours a week should expect to spend an additional six hours a week on coursework outside the classroom.

SALE OF NOTES
Lectures given in this class are the property of the instructor. They may not be recorded without prior permission from the instructor. They may not be used for any commercial purpose. This includes the sale of notes to a retail distributor who reproduces them for resale to other students. Students found to be in violation of this policy may be subject to discipline under University policies.

GENERAL EXPECTATIONS AND EXTRA CREDIT
Students are responsible for all information disseminated in class and all course requirements, including deadlines and examinations. A student is not permitted to submit extra work in an attempt to raise his or her grade unless the instructor has specified at the outset of the class such opportunities will be afforded to all students.

WRITING EXPECTATIONS
Writing is a core competency in every course at the SJMC. The school’s commitment to student writing is reflected in its participation in the University’s “Writing-enriched Curriculum” program. The SJMC also assesses student writing and other competencies routinely in all skills courses and reports results to faculty so they can improve writing instruction.

All students are expected to consistently improve their writing as they progress through the curriculum. Proper grammar, punctuation, spelling, style and construction are among the most basic expected competencies. Consideration of audience, synthesizing information from a variety of sources, and mastery of objective tone are also important skills in the journalism field.

Students should read the SJMC Expected Writing Abilities - Journalism Skills Courses for more about these and other writing skills that students are expected to master before graduating. Other skills specific to this course are listed below.

**STUDENT WRITING SUPPORT**

15 Nicholson Hall and satellite locations varying by semester
(612-625-1893) [http://writing.umn.edu/sws](http://writing.umn.edu/sws)

Student Writing Support offers face-to-face consulting for all University of Minnesota students working on any writing project. Consulting is available by appointment online and in Nicholson Hall, and on a walk-in basis in Appleby Hall. In addition, SWS offers a number of web-based resources on avoiding plagiarism, documenting sources, and planning and completing a writing project. See [http://writing.umn.edu/sws/quickhelp/index.html](http://writing.umn.edu/sws/quickhelp/index.html)

Also, if you feel you need help with writing, you may want a copy of one of the many books that help writers hone their skills. These include:

- The University’s *Student Writing Guide* which provides detailed, step-by-step guidance through the writing process and lists numerous writing resources. Available on the course Moodle site or on the web at: [http://writing.umn.edu/sws/assets/pdf/2010swg.pdf](http://writing.umn.edu/sws/assets/pdf/2010swg.pdf)

These are just a few of the many books you can find about quality writing techniques. Your work in this class will be judged, at least in part, on your ability to communicate well.

**DISABILITIES**

*The University of Minnesota is committed to providing equitable access to learning opportunities for all students. Disability Resource Center (DRC) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.*
● If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DRC at 612-626-1333 to arrange a confidential discussion regarding equitable access and reasonable accommodations.
● If you are registered with DRC and have a current letter requesting reasonable accommodations, we encourage you to contact your instructor early in the semester to review how the accommodations will be applied in the course.
● Accommodations are not retroactive, and will be applied in the course only from the date by which you inform the instructor of the situation and present your DRC letter.

Additional information is available at: https://diversity.umn.edu/disability/  Note: Students with special needs may receive this syllabus and other course materials in alternative formats upon request. Contact the SJMC Student Services Center for more information, 612-625-0120.

SCHOLASTIC MISCONDUCT – DEFINITION
Scholastic misconduct is broadly defined as “any act that violates the rights of another student in academic work or that involves misrepresentation of your own work. Scholastic dishonesty includes, (but is not necessarily limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as your own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials; or interfering with another student’s work.”

The SJMC has its own policy on plagiarism and fabrication, which are considered extremely serious breaches of academic conduct AND professional practice in the media industries. See http://cla.umn.edu/sjmc/about/plagiarism-fabrication-policy. If you are unsure what constitutes plagiarism or fabrication, you may complete a tutorial on the topic found here: https://ay15.moodle.umn.edu/course/view.php?id=989.

Proven scholastic misconduct in this course will result in an assignment grade of F.

SEXUAL HARASSMENT
University policy prohibits sexual harassment as defined in the 12/11/98 policy statement. Copies of the 12/11/98 policy statement on sexual harassment are available at 274 McNamara Alumni Center or online. Complaints about sexual harassment should be reported to the University Office of Equal Opportunity and Affirmative Action at 274 McNamara Alumni Center.

EXCUSED ABSENCES
Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include illness of the student or his or her dependent, participation in intercollegiate athletic events (see the Administrative Policy: Intercollegiate Athletic Events during Study Day and Finals Weeks: Twin Cities, which prohibits intercollegiate athletic competition during study day and finals week except under certain circumstances), subpoenas, jury duty, military service, bereavement, and religious observances. Such
circumstances also include activities sponsored by the University if identified by the senior academic officer for the campus or his or her designee as the basis for excused absences. The instructor has the right to request verification for absences. Such circumstances do not include voting in local, state, or national elections.

STUDENT MENTAL HEALTH AND STRESS MANAGEMENT
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via http://www.mentalhealth.umn.edu

EMAIL PROTOCOL
Email accounts have been established as the University’s official means of communication with students; you are expected to check your umn.edu email account regularly. When contacting students via email, faculty members are obligated to communicate solely through students’ umn.edu account rather than through other email services.

ADDITIONAL STUDENT LEARNING ASSESSMENT
The national accrediting agency for journalism education has required that all accredited journalism schools assess student mastery of 12 core values and competencies that every graduate of a journalism and mass communication program should possess. According to the Accrediting Council on Education in Journalism and Mass Communication, all graduates, irrespective of their particular specialization, should be able to:

- understand and apply the principles and laws of freedom of speech and press, for the country in which the institution that invites ACEJMC is located, as well as receive instruction in and understand the range of systems of freedom of expression around the world, including the right to dissent, to monitor and criticize power, and to assemble and petition for redress of grievances;
- demonstrate an understanding of the history and role of professionals and institutions in shaping communications;
- demonstrate an understanding of gender, race, ethnicity, sexual orientation and, as appropriate, other forms of diversity in domestic society in relation to mass communications;
- demonstrate an understanding of the diversity of peoples and cultures and of the significance and impact of mass communications in a global society;
- understand concepts and apply theories in the use and presentation of images and information;
- demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity;
- think critically, creatively and independently;
conduct research and evaluate information by methods appropriate to the communications professions in which they work;
write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve;
critically evaluate their own work and that of others for accuracy and fairness, clarity, appropriate style and grammatical correctness;
apply basic numerical and statistical concepts;
apply tools and technologies appropriate for the communications professions in which they work.

School of Journalism and Mass Communication
Plagiarism and Fabrication Policy
Adopted by faculty: 1/31/2013; Revised 12/15/2014

Plagiarism and fabrication are serious offenses both in academia and in the professions of journalism and strategic communication. The School of Journalism and Mass Communication will not tolerate any forms of these transgressions.

The SJMC’s position on plagiarism and fabrication complies with the Student Conduct Code adopted and amended by the University of Minnesota Board of Regents, which lists those as scholastic dishonesty offenses subject to appropriate disciplinary action. Sanctions at the university level might involve a written reprimand for first-time offenders or, if repeated, more serious consequences, including removal from the major or expulsion from the university.

Because plagiarism and fabrication destroy the trust – and ruin the careers – of journalists, strategic communication professionals and scholars, the SJMC takes a particularly strong position on these offenses.

We are resolved, therefore, to impose the following consequences in all SJMC courses, other for-credit works (e.g., theses and dissertations) and exams regarding any instance of unambiguous and documented plagiarism or fabrication, including a first-time offense:

- The student will receive a grade of “F” on the assignment, or the course, at the discretion of the instructor.
- The instructor will file a report on the incident with the university’s Office for Student Conduct and Academic Integrity. For more information on OSCAI’s handling of such reports, visit http://www.oscai.umn.edu/integrity/student/index.html

Furthermore, instances of unambiguous and documented plagiarism or fabrication in SJMC classes or enterprises following the first incident are considered multiple or “persistent” and may result in the student’s removal from the SJMC major and/or other serious university consequences.
Appendix

**What is plagiarism?**

Plagiarism is the stealing of content – writing, reporting photography, graphics, editorial cartoons, creative ideas, scholarly work -- without proper citation or attribution. In other words, it is passing off someone else’s work as your own. This does not simply mean a violation of copyright. It is an act of theft and betrayal toward the audience as well as the original source. Any material used in a student paper, ad campaign, story or research report must be properly credited if it is not the student’s own work. This includes material developed through collaborative work with other students, where one student’s work should not simply be copied and represented as another’s.

You have plagiarized if you do (including but not limited to) the following:

- Copy content -- text, images or designs-- from the Web and paste it into your own work without quotation marks or proper attribution or other sourcing.
- Present previously reported information published online or in print as your own without proper attribution or credit (subject to the exceptions listed below).
- Present someone else’s unique phrases or images as your own.
- Paraphrase someone else’s ideas or statements as your own.
- Borrow words, original concepts, phrases or data from original sources and blend them with one’s own without acknowledging the sources.
- Submit an assignment you completed for another class (self-plagiarism)

Exceptions: In general, one does not need to provide explicit attribution if the information falls in one of three categories:

- **Common knowledge:** When information is commonly known to a majority of people, you don’t have to attribute it. Examples include: *The World Trade Center and the Pentagon were attacked on Sept. 11, 2001. Mark Dayton is the governor of Minnesota.*

- **Background information:** When information is undisputed factually and is available from a wide variety of reliable sources, you don’t have to attribute it. For example: *Jerry Kill served as the head coach at Saginaw Valley State University and Emporia State University, and also played college football at Southwestern College in Winfield, Kansas.*

- **Observation:** When you witness something first hand, you don’t have to attribute the information. For example if you are covering a protest and you see that passing motorists are honking and waving in support of the protesters, you can report that without quoting anyone or attributing the information to another source.

**What is fabrication?**
Fabrication is inventing something and representing it as true in a work product (story, research paper, etc.) where *truthfulness is the expectation*. This includes purported facts, characters, quotes, anecdotes, places, passages or other details presented as real and researched. All such details in an assignment must be true and reported, not imagined, unless the instructor has provided invented material for the purposes of a class exercise. Fabrication also includes altering photographs to distort the reality of the scene.

You have fabricated if you do the following:
- Invent any information, person, quote, detail or situation that does not exist in the world. This includes inventing information about people you have interviewed.
- Represent that you have spoken to someone who is real in the world but with whom you did not speak.
- Alter photographs so they distort reality, including staging, posting, rearranging, reversing or removing items from a scene. (Traditional adjustments such as cropping, dodging or burning are not fabrications unless those acts distort the reality of the photograph.)
- Fail to label photo illustrations clearly as illustrations.

Fabrication for strategic communication messages is acceptable when it is clear that the situations are not intended to represent reality (e.g. singing cows in an ice cream commercial, claims about “the world’s best…” [acceptable puffery]).

**Responsibility for avoiding plagiarism and fabrication**
As the University’s Student Conduct Code stipulates: “It is the responsibility of all students to understand the standards and methods of proper attribution and to clarify with each instructor the standards, expectations, and reference techniques appropriate to the subject area and class requirements, including group work and internet use. Students are encouraged to seek out information about these methods from instructors and other resources and to apply this information in all submissions of academic work.”

**Detecting and documenting plagiarism and fabrication**
Just as the Web has made it easier to plagiarize, it also allows instructors to more easily identify instances of plagiarism and fabrication. Instructors may use any means to detect scholastic dishonesty, including anti-plagiarism software, Google searches and contacts with listed sources to verify the student has done original work.

When confronted with an instance of unambiguous plagiarism or fabrication, SJMC instructors must do the following:
- Document clearly the source of the plagiarism or fabrication.
- Discuss the transgression with the student.
- Be sure the student understands the nature of the incident and the seriousness of it.
- Consult with and inform the Director of Undergraduate Studies or the Director of Graduate Studies about the matter.
- File a report, with documentation, to the Office for Student Conduct and Academic Integrity.
Students can avoid plagiarism or fabrication by doing the following:

- Always creating source lists for assignments that include phone and e-mail contacts for personal sources and full citation information for other reference sources.
- Keeping your own notes separate from any source material.
- Avoiding any “cut and paste” note taking.
- Attributing anything that even comes close to the phrasing or ideas of source material.
- Asking your instructor if you are uncertain. It is your responsibility to clarify any murky issues that may confuse you.
- Always being able to explain how you got your information.

Learning more about how to cite sources and avoid plagiarism by visiting the online tutorials on the university’s libraries website: [http://tutorial.lib.umn.edu/](http://tutorial.lib.umn.edu/).

Completing the SJMC Avoiding Plagiarism and Fabrication tutorial available at [https://ay15.moodle.umn.edu/course/view.php?id=989](https://ay15.moodle.umn.edu/course/view.php?id=989)

Faculty members can reduce the instances of plagiarism or fabrication by the following strategies:

- Clearly explaining the SJMC’s policy to students.
- Requiring students to list sources with contact numbers or full reference information as warranted.
- Requiring students to attach all source material to an assignment with a written pledge that the assignment itself is the student’s own work.
- Checking listed sources to verify them.
- Creating original assignments that are difficult for students to plagiarize.
- Following through on the SJMC policy with students who do plagiarize or fabricate.

This document has been created from and influenced by a number of sources, including the University of Minnesota Board of Regent’s Student Conduct Code (Adopted July 10, 1970, with amendments effective Jan. 1, 2013), the Walter Cronkite School of Journalism and Mass Communication at Arizona State University at [http://cronkite.asu.edu/about/plagiarism.php](http://cronkite.asu.edu/about/plagiarism.php) and the Carnegie Media Law for Journalism Schools Task Force, which also cites its many sources at [http://jschoollegal.org/plagiarism-and-fabrication-policy/](http://jschoollegal.org/plagiarism-and-fabrication-policy/)

Nothing in this document is intended to minimize the seriousness of other forms of academic dishonesty as described in the relevant University of Minnesota policies. Any form of unambiguous, documented academic dishonesty in SJMC classes will result in consequences that may include a course grade of “F.”