JMC 3640
DATA JOURNALISM

This class is built to train you on the skills to both analyze data and create data visualizations. The goal is to tell visual stories with — and about — data. However, to take the class you do not need to know (or like) anything about math, statistics or data analysis.

When you're done you'll have a portfolio of interactive charts, graphs and maps and understand the data that underly them.

Specific topics will include: infographics, social media, investigative reporting, public records, JavaScript, basic statistics, spreadsheets and "newsroom math." Absolutely no prior background in math, statistics, coding or data analysis is needed.

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Drop-in / office hours:
• Tues. 1 - 2:30 p.m.
• Thurs. 9:30 - 11 a.m.

Department info
School of Journalism
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You will learn to

- design and write infographics
- identify stories using data analysis
- write about data analysis
- write code in JavaScript
- achieve understanding of:
  - basic statistics
  - database analysis
  - visualization principles

Grading

Labs	50%
Final Project	25%
Quizzes /Attendance / Participation	25%

Textbook

No textbook required in this course. I will assign a variety of stories, blog posts, tutorials, YouTube videos, etc. I'll typically give you the assignment on Thursday for the following work.

Attendance, participation and quizzes

You are expected to attend and be prepared to participate in every class session. It's my experience that attendance correlates almost perfectly with final grades.

I'll give you a super-easy quiz at the start of each class.

However, you can miss any class session as long as you email me *in advance* that you are taking a "PTO day." When you have a job, you'll need to do this.

Missing classes without taking PTO will result in failing that day's quiz.

Unprofessional behavior or missing an exceptional number of sessions without taking PTO or will result in a penalty of up to a full letter grade (at the professor's sole discretion).

Examples of unprofessional behavior are disrespecting your colleagues, disruptiveness or use of offensive language.

No retroactive excused absences will be given except in extraordinary circumstances.

Additionally, each of you will have a public records request to "bird dog" during class time over the course of the semester. Your zeal in doing so will be reflected in an adjustment of up to +/- 5 points to this grade.

Grading

This class is graded on a +/- basis *without* A+. Grades are rounded to the nearest 0.1 percent by ICON. For journalism majors, this class must be passed with a C- or better in order to continue in the major.

A	94% - 100%
A-	90% - 93.9%
B+	87% - 89.9%
B	84% - 86.9%
B-	80% - 83.9%
C+	77% - 79.9%
C	74% - 76.9%
C-	70% - 73.9%
D+	67% - 69.9%
D	64% - 66.9%
D-	60% - 63.9%
F	less than 60%

Labs

While this class covers a lot of material on data and coding, it is a journalism class. And journalism is something you do. For that reason, the largest part of your grade comes from *six* labs in which you will analyze and present data using clearly documented code.

There will be time in class to work on the labs, but you should expect to spend significant time outside of class as well.

Rubrics will be provided in class. The lowest grade of the *six* will be dropped.

Final project

Your final project will be one of the following based on a substantive data analysis:

- a 1,000-or-more-word story based on substantive data analysis and multiple small, simple visualizations

- an extensive multipanel, interactive interactive dashboard for exploration of a large dataset

- a 14" x 23" (or 23" x 14") print infographic with multiple elements (probably best only for those who have already taken a graphic design course or worked as designers at the Daily Iowan)

- another journalism project based on coding and data, e.g. an Alexa skill, with the approval of the instructor

During the final week of your class, each of you will give a 5 – 10 minute presentation of your work. This will be factored into your grade.

Deadlines

In journalism, deadlines count. A lot. So any work that is turned in at all late will be marked down 10% of the available points. No work will be accepted more than 24 hours late. Extensions may be given if circumstances warrant it, but the farther ahead you ask the more likely I am to grant it. Extensions will not be given retroactively.

Revisions

You have 24 hours from the time I return an assignment to make revisions for up to half the points you missed.

Extra credit

Journalism is a participatory activity, so those who take the initiative to get involved outside of class can earn a small amount of extra credit in recognition of their initiative through active participation in student journalism groups, work on campus-based media or attendance at *specific* journalism-related events.

Details will be announced in class. Typically, participation will net 0.5 to 1.0 points depending on the time commitment involved.

The approved student groups are the Online News Association, ED on Campus, the National Association of Black Journalists and Public Relations Student Society of America. Approved campus-based media organizations are The Daily Iowan, DITV, KRUI, Fools Magazine and IowaWatch.

Lecture and assignment schedule

Week	Dates	Topic
Week 1	Aug. 27 Aug. 29	Course overview Dataviz basics

Week	Dates	Topic
Week 2	Sept. 3 Sept. 5	Excel super powers
Week 3	Sept. 10 Sept. 12	Intro to JS Lab #1 due Sept. 16
Week 4	Sept. 17 Sept. 19	Getting and cleaning data
Week 5	Sept. 24 Sept. 26	Database analysis
Week 6	Oct. 1 Oct. 3	Statistics for Journalists Lab #2 due Oct. 6
Week 7	Oct. 8 Oct. 10	Writing/conceiving a data story Final project proposal due Oct. 14
Week 8	Oct. 15 Oct. 17	HTML/CSS Scraping
Week 9	Oct. 22 Oct. 24	(Lab time) Lab #3 due Oct. 28
Week 10	Oct. 29 Oct. 31	Mapping and GIS
Week 11	Nov. 5 Nov. 7	Political data
Week 12	Nov. 12 Nov. 14	Crime data Lab #4 due Nov. 18
Week 13	Nov. 19 Nov. 21	Special topics (TBD)
Week 14	Dec. 3 Dec. 5	(Lab time) Final project due Dec. 9
Week 15	Dec. 10 Dec. 12	Presentations

Technology policy

There is ample evidence that the use of laptops, phones and other devices in class leads to poorer learning outcomes and poorer grades for students. That's true even when devices are used for notetaking or other in-class purposes.

Technology should be used appropriately. Please use common sense.

Email policy

Any email you send to me should be considered a professional communication. That means it should be:

- addressed ***Dear Professor Lathrop:***

- written in complete sentences

- written in a work-appropriate tone

- signed with your full name

(These are good guidelines to follow with your other professors.)

I typically reply to email by the end of the next business day.

In addition, university policy dictates that all email communication with instructors must come from your @uiowa.edu email address to be official.

Ethics

You are expected to follow the SPJ Code of Ethics in addition to any code of ethics in use by the publication you are writing for.

Additionally:

- You must identify yourself by name before beginning an interview.

- Even if you are only reporting for class, you should let interview subjects know your work it for "possible publication"

- You should avoid going "off the record" (although "not for attribution" is often acceptable).

- I encourage you to tape your interviews, and you should *generally* let your interview subjects know they are being taped over the phone.

Changes in grades

If you believe a specific grade has been given in error or otherwise

should be changed, you need to notify me by email within 48 hours of the grade being posted and schedule a meeting within the following week to discuss it in person. Those meetings should happen during office hours unless you have class or other academic obligations during those times.

No changes or discussions of changes will be handled in email. (I will check to make sure there has not been data entry or similar error immediately.)

If you believe your semester grade has been given in error or otherwise should be changed, you need to notify me within one week of

grades being posted and schedule a time to meet with me in person before the beginning of the next semester. =

No changes or discussions of changes will be handled in email. (I will check to make sure there has not been data entry or similar error immediately.)

Resources

There will be copies of course materials and out software at the SJMC Student Center, Adler Journalism Building room E350. https://clas.uiowa.edu/sjmc/facilities/resource-center

Students may find the Speaking Center very useful, especially for the presentation. https://speakingcenter.uiowa.edu

The Writing Center (https://writingcenter.uiowa.edu) and the Tutor Iowa site (https://tutor.uiowa.edu) can also be valuable for students seeking extra help.

For help writing in your journalism classes, you can also get help from the Writing Assistance program at the SJMC Resource Center E350 Adler. https://clas.uiowa.edu/sjmc/facilities/resource-center#guidelines

CLAS Teaching Policies & Resources

Absences and Attendance

Students are responsible for attending class and for contributing to the learning environment of a course. Students are also responsible for knowing their course absence policies, which will vary by instructor. All absence policies, however, must uphold the UI policy related to student illness, mandatory religious obligations, including Holy Day obligations, unavoidable circumstances, or University authorized activities (https://clas.uiowa.edu/students/handbook/attendance-absences). Students may use this absence form to aid communication; the instructor will decide if the absence is excused or unexcused (https://clas.uiowa.edu/sites/default/files/ABSENCE%20EXPLANATION%20FORM2019.pdf).

Academic Integrity

All undergraduates enrolled in courses offered by CLAS have, in essence, agreed to the College's Code of Academic Honesty. Misconduct

is reported to the College, resulting in suspension or other sanctions, with sanctions communicated with the student through the UI email address (https://clas.uiowa.edu/students/handbook/academic-fraud-honor-code).

Accommodations for Disabilities

UI is committed to an educational experience that is accessible to all students. A student may request academic accommodations for a disability (such as mental health, attention, learning, vision, and physical or health-related condition) by registering with Student Disability Services (SDS). The student is then responsible for discussing specific accommodations with the instructor. More information is at https://sds.studentlife.uiowa.edu/.

Administrative Home of the Course

The College of Liberal Arts and Sciences (CLAS) is the administrative home of this course and governs its add/drop deadlines, the second-grade-only option, and related policies. Other colleges may have different policies. CLAS policies may be found here: https://clas.uiowa.edu/students/handbook.

Communication and the Required Use of UI Email

Students are responsible for official correspondences sent to the UI email address (uiowa.edu) and must use this address for all communication within UI (Operations Manual, III.15.2).

Complaints

Students with a complaint about an academic issue should first visit with the instructor or course supervisor and then with the Chair of the department or program offering the course; students may next bring the issue to the College of Liberal Arts and Sciences. For more information, see https://clas.uiowa.edu/students/handbook/student-rights-responsibilities.

Final Examination Policies

The final exam schedule is announced around the fifth week of classes; students are responsible for knowing the date, time, and place of a final exam. Students should not make travel plans until knowing this information. No exams of any kind are allowed the week before finals. Visit https://registrar.uiowa.edu/final-examination-scheduling-policies.

Nondiscrimination in the Classroom

UI is committed to making the classroom a respectful and inclusive space for all people irrespective of their gender, sexual, racial,

religious or other identities. Toward this goal, students are invited
to optionally share their preferred names and pronouns with their
instructors and classmates. The University of Iowa prohibits
discrimination and harassment against individuals on the basis of
race, class, gender, sexual orientation, national origin, and other
identity categories set forth in the University's Human Rights policy.
For more information, contact the Office of Equal Opportunity and
Diversity (diversity.uiowa.edu).

Sexual Harassment

Sexual harassment subverts the mission of the University and threatens
the well-being of students, faculty, and staff. All members of the UI
community must uphold the UI mission and contribute to a safe
environment that enhances learning. Incidents of sexual harassment
must be reported immediately. For assistance, please see https://
osmrc.uiowa.edu/.

School of Journalism and Mass Communication Learning Goals

The School of Journalism and Mass Communication is committed to your
academic and professional success. In line with this commitment, we
have identified particular learning outcomes that every student should
obtain by the time they earn their degree. You can find more
information about these learning outcomes here: https://
clas.uiowa.edu/sjmc/undergraduate-programs/sjmc-assessment-plan.

We regularly assess the curriculum to determine whether students are
achieving these outcomes. This course contributes to these learning
outcomes by **reinforcing** elements of the storytelling, media literacy
and multiculturalism goals. Achieving these outcomes means students
will:

- demonstrate the ability to gather factual story elements, and to
  evaluate and express them in logical, narrative forms for multiple
  media and audiences. (Storytelling Learning Objective No. 1)

- display the ability to access and analyze data, report facts
  accurately, research and edit information responsibly and in a manner
  commensurate with professional standards. (Storytelling Learning
  Objective No. 2)

- Students will demonstrate the ability to apply above concepts in a
  manner that is sensitive to audiences across all media. (Storytelling
  Learning Objective No. 3)

- learn how to create and disseminate media messages in various forms.
  (Media Literacy Learning Objective Number 3)

- demonstrate an ability to produce media that serve the needs and interests of diverse communities and reflect their voices and experiences. (Multiculturalism Learning Objective Number 1)