DATA JOURNALISM (JMC3640)

COURSE HOME AND SYLLBUS FOR DATA JOURNALISM, SPRING 2019 SESSION.

How to find and tell stories using data; hands-on introduction to data visualization, data analysis and data literacy for journalists and communications professionals.

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, JavaScript, basic statistics, spreadsheets and “newsroom math.” Absolutely no prior background in math, statistics, coding or data analysis is needed.

THE BARGAIN

This stuff is hard for a lot of people. So this class comes with a guarantee.

If you put in the work, I will make sure you master the material.

Your side of the bargain: come to class, do the reading, turn in the assignments and come to office hours if you’re stuck.

My side of the bargain: be available, help you through every assignment, cut you a break when you need it and make sure that everyone who does the work gets a fair grade.

CLASSROOM STYLE

To the largest extent possible, class time is going to be devoted to working through your assignments one-on-one and in small groups. From time to time, we’ll hold a group discussion or break into a mini-lecture on shared pain-points, curiosities and misunderstandings that come up as people move through the material.
Because part of the learning is helping each other, you have to be in class even if you're done with the upcoming assignment. If you don't feel like helping out others (but why wouldn't you?), you can always get a jump on the next project.

**COURSE OUTLINE**

This class is broken into four “sections,” each of which leads to a publishable data journalism “thing.” The first three chunks are for basic skill development in common, the final – and longest – chunk is a project for which you will develop and use an individualized skill set.

Each chunk has its own page with readings and an interactive tutorial.

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Jan. 14 - Feb. 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to computer code, basic statistics and some fundamental truths about data. Each week a problem set will be due via ICON.</td>
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<table>
<thead>
<tr>
<th>Section 2</th>
<th>Feb. 4 - Feb. 22</th>
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<tbody>
<tr>
<td>Data visualization theories, database software and HTML basics. Each week a problem set will be due via ICON.</td>
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<table>
<thead>
<tr>
<th>Section 3</th>
<th>Feb. 25 - March 22</th>
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<tbody>
<tr>
<td>Geographic data, web scraping and bulletproofing. Each week a problem set will be due via ICON.</td>
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<thead>
<tr>
<th>Section 4</th>
<th>March 24 - May 2</th>
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<tbody>
<tr>
<td>This chunk, nearly half the semester, is dedicated to a single project. That doesn't mean class is canceled (sorry), in fact it becomes increasingly important. You will have brief check-ins with me, get assistance and work on your project alongside your peers. You are expected to get and receive help from your peers. From time-to-time, I'll ask one of you to present your in-progress work to the class for discussion. Each of you will get to do so at least once. Each week you'll turn in a short project update via ICON. The major project will be due during finals period (date assigned by the registrar).</td>
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**GRADING**

Unfortunately, grades are necessary. In my experience, by the way, not matter the grading scheme there is a strong correlation between attendance and final grade.
So remember that.

The grading is as follows:

- Section 1: 15%
- Section 2: 15%
- Section 3: 15%
- Section 4:
  - Updates: 15%
  - Final project: 40%

**EXTRA CREDIT: ATTENDANCE**

For attendance: you can take up to four no-fault, no-questions-asked PTO days (excused absences) so long as you let me know before class. That’s how vacation/sick time functions in the working world, so welcome aboard.

If you are an athlete, or cover athletics for the D.I., KRUI or the SID’s office, you can be excused for travel days without penalty. Travel for other courses also does not count against PTO. But in both cases you need to let me know as far in advance as you reasonably can.

The good news is that attendance is extra credit.

- Perfect attendance: 10 points
- Miss fewer than two two days: 5 points
- Miss fewer than four days: 1 point

**EXTRA CREDIT: ENGAGEMENT**

I will award extra credit points for engagement to those who speak up in class, assist others and/or meet with me during office hours. You can earn up to 10 percentage points, commensurate with your efforts.

**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 published and schedule a time to meet with me in person before the beginning of the next semester.

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

**GRADING SCALE**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>93 - 100%</td>
</tr>
<tr>
<td>A-</td>
<td>90 - 92%</td>
</tr>
<tr>
<td>B+</td>
<td>87 - 89%</td>
</tr>
<tr>
<td>B</td>
<td>83 - 86%</td>
</tr>
<tr>
<td>B-</td>
<td>80 - 82%</td>
</tr>
<tr>
<td>C+</td>
<td>77 - 79%</td>
</tr>
<tr>
<td>C</td>
<td>73 - 76%</td>
</tr>
<tr>
<td>C-</td>
<td>70 - 72%</td>
</tr>
<tr>
<td>D+</td>
<td>67 - 69%</td>
</tr>
<tr>
<td>D</td>
<td>63 - 66%</td>
</tr>
<tr>
<td>D-</td>
<td>60 - 62%</td>
</tr>
<tr>
<td>F</td>
<td>Less than 60%</td>
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**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) Spring 2018 - JMC 3640 7

- 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)

**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.)

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

**AP STYLE**

Writing in this course will be in Associated Press Style. To assist you, we have produced several guides to SJMC’s “basic” AP Style, enforced across all writing and reporting courses.

- The full version
- The short version
- The short, short version

**THE SHORT, SHORT VERSION**

- Numerals
  - Spell out one through nine
  - Use comma separated numerals for 10 through 999,999
  - Use numerals with words for 1 million and up
  - Percentages: always use numerals, spell out the word percent
  - Money: Always use a dollar sign. Always use numerals for 999,999 and under.
  - Age, weight, height, score : Always use numerals for 999,999 and under.

- Lists
  - Do not use a comma before the concluding conjunction
  - Exceptions: lists with an item containing a comma, series of complex phrases or lists where omitting it would be confusing.
• Quotations
  • Always surround direct quotes with “”
  • Do not introduce indirect or partial quotations with a comma
  • Always place concluding punctuation inside the quotation marks

• Titles
  • Formal job titles in front of a name (but nowhere else) are capitalized
  • Abbreviate Rep., Sen., Gov., Dr. and military titles in front of names
  • Always specify field of the doctorate unless it’s a physician, dentist or optometrist
  • Place “” around titles of movies, books, songs and other creative works

• Company, department and organization names
  • Only use an acronym if your stylebook specifically OKs it
  • Only capitalize proper names (Department of Philosophy but philosophy department)
    • Except U.S. cabinet agencies: Justice Department, Commerce Department, etc.

• Dates, times and places
  • Use time, date, place in that order
  • Use a.m. and p.m., but noon and midnight (not 12 p.m. and 12 a.m.)
  • Months
    • Only abbreviate when used with a day-of-the-month (Nov. 1)

• Addresses and locations
  • Abbreviate directions, and St., Ave. and Blvd. when used in a street address.
  • Spell out states except in datelines and political affiliations (then use AP abbreviations)
  • Specify a city’s state (U.S.), province (Canada) or country (all other) in all uses
    • Unless it’s an exception listed under DATELINES (e.g. Chicago, London, Toronto)
    • Or it’s in the same jurisdiction (state, province, country) as the story’s dateline

• Polls and surveys
  • Always include the margin of error, sample size, date, pollster and sponsor
  • Use “X percentage points” not “X percent” for differences and margins-of-error
  • Differences within the margin of error are a “tie” or “close”
  • Differences between one and two times the margin of error are “apparent” or “slight”
  • Use good poll hygiene: only use polls and surveys from reputable sources
    • Those generally: are timely, disclose the actual questions, are transparent about funding and goals,
      and use random sampling or compellingly explain why not

• When in doubt, check the AP Stylebook followed by Webster’s New World College Dictionary as the
  authorities on preferred spelling and usage.

**GRADUATE CREDIT**

This course can be taken for graduate credit, but when done so requires extra reading and work.

Since graduate students are typically not from a journalism background, some of this is to familiarize you with
the norms and skills of journalism. Some is to to push you to develop additional skills beyond those expected of undergraduate students.

If there are grad students in the course, we will discuss this as a small group during the first week of classes.

**CLAS TEACHING POLICIES & RESOURCES**

**ADMINISTRATIVE HOME**

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 other policies. These policies vary by college (clas.uiowa.edu/students/handbook).

**ELECTRONIC COMMUNICATION**

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

**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 should then discuss accommodations with the course instructor (sds.studentlife.uiowa.edu).

**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 at diversity@uiowa.edu or diversity.uiowa.edu.

**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.

**CLAS FINAL EXAMINATION POLICIES**

The final exam schedule for each semester 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 final exam information. No exams of any kind are allowed the week before finals (clas.uiowa.edu/faculty/teaching-policies-resources-examination-policies).
MAKING A COMPLAINT

Students with a complaint should first visit with the instructor or course supervisor and then with the departmental executive officer (DEO), also known as the Chair. Students may then bring the concern to CLAS (clas.uiowa.edu/students/handbook/student-rights-responsibilities).

UNDERSTANDING 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, definitions, and the full University policy, see osmrc.uiowa.edu.

ADDITIONAL RESOURCES

There are copies of our textbook and other course materials at the SJMC Resource Center, Adler Journalism Building room E350 (clas.uiowa.edu/sjmc/facilities/resource-center).

Students may find the Speaking Center very useful in becoming more comfortable participating in class (speakingcenter.uiowa.edu).

The Writing Center (writingcenter.uiowa.edu) and SJMC’s Writing Assistance Program (clas.uiowa.edu/sjmc/facilities/resource-center#guidelines) may be helpful in completing your personal essay.

The Tutor Iowa (tutor.uiowa.edu) can also be valuable resource for students seeking a leg up or having difficulties in this or any other class.

A NOTE FROM THE WRITING CENTER

Visit the Writing Center this semester and take the stress out of writing assignments.

Book a 30 minute appointment when you need it.

Reserve a regular weekly meeting for the entire semester — register now through our website: writingcenter.uiowa.edu.

Upload a draft to our online system and get comments and suggestions by email.

Sign up for graduate student programs and professional development opportunities.

All our services are free (it’s the best deal in town). Check out our website at writingcenter.uiowa.edu or stop by to see us in 110 EPB.

The Writing Center is hosted by the Department of Rhetoric and supported by the College of Liberal Arts and Sciences.