



LOYOLA
UNIVERSITY CHICAGO

Preparing people to lead extraordinary lives

COMM 415 Data Powered Digital Storytelling Fall 2023

Jared Rutecki MS

jrutecki@luc.edu | 847-769-6718

Tuesdays Aug. 29 - Dec. 12 2023, 7 - 9:30 pm

Office Hours: By Appointment Only – Online Appointments Available

Course Description: The world is made up of data - global, local and personal. The information illustrates problems like climate change and inequities that can only be told through carefully chosen statistics and context.

This class is focused on how to tell stories with data to create social impact. We will learn through research, professional examples and hands-on work with tools and technologies. We will introduce basic methods for research, cleaning and analyzing datasets, but the focus is on creative methods and media for data presentation and storytelling. We will consider the emotional, aesthetic and practical effects of different presentation methods.

Over the course of the semester, students will work in small groups to create three sketches, each using a different technique for telling a data-driven story. Think about a “sketch” as a half-realized project; where you have implemented just enough of the most important details of the idea in order for us to understand your vision. A sketch is NOT a fully realized presentation of a data story. For the final project, students will have the chance to expand upon one of these sketches to create a fully realized presentation of a data-driven story in the medium or media of their choice.

Course Outcomes: Students learn to use records and data techniques to analyze information and cultivate stories to be told in digital formats. By the end of this course you should be able to:

- Students will learn techniques for finding a story in data, building a basic set of tool-assisted data analysis skills.
- Students will build things that tell data-driven stories with a rich set of digital and non-digital tools, online and offline.
- Students will practice arts- and rhetoric-based approaches to telling data-driven stories.

- Students will learn basic ethnographic and anthropological approaches to identifying and researching audiences.

Course Design: This course is hands-on with data, and will do a lot of peer production of knowledge, so your participation and presence is essential to making it a success. Each of the main technique-focused sketches will include an introduction to approaches and tools, but then focus on a small group project you will present for discussion and criticism to the class. The course culminates in a final project that will be a presentation of a data-driven project in some media. Each project must be done in a group of two or more. Please work with different people for each project.

Here's a description of these modules and the associated required coursework.

Assigned Readings: Throughout the semester other readings will be assigned. Every text will be available online through the library, the open web, or put on reserve at the Lewis Library. You are more than welcome to purchase or rent any of the readings, but all readings will be available for shared use through the library or online.

Grade components

Assignment	Pct	Points	Explanation
Participation	30%	Scale of 5 each week 90 points total	This class heavily relies on class participation. Each class is worth a total of 5 participation points. <ul style="list-style-type: none"> • 1 point: attending class • 1 point: contributing meaningfully to the discussion • 1 point: completing all in class activities or group work • 2 points: completing all

			assignments each week
Final project	20%	60 points	You must present your project to the class. Full details can be found in the Group Project document
Bibliography	20%	60 points	This assignment serves as the foundation for everything else you'll turn in as a team for the rest of the semester. See the Group Project document
3 group data exploration projects	30%	90 points total 30 points each	5 minute presentation, discussion about data sketch. For a full breakdown of points, details, and requirements – see the Group Project document

Course Policies

Attendance – Regular and on time attendance is essential for the educational process to work. Loyola University Chicago expects all students to attend every scheduled class on time. Exceptions may be made for University sponsored or work related activities, illness, or valid emergency situations. Any unexcused late arrivals and absences will result in a lower participation grade. Full participation points will not be awarded simply because you showed up – you are expected to come prepared, participate, and stay through the entire length of class.

Meeting Deadlines – Deadlines for all projects are firm. Any work turned in after the deadline will receive a one letter grade reduction for each week it is late, even if by one day.

Special Needs – Please give me written notice in the first week of class about any medical or other conditions that may interfere with your individual performance. Documentation may be required. Information about the Student Accessibility Center (SAC) can be found at <https://www.luc.edu/sac/>

Wellness Center – Students are urged to contact the Wellness Center for any physical or mental health issues. Visit <http://www.luc.edu/wellness/> if you have issues or concerns about you or someone you know.

Spelling and Grammar – All assignments must be typed (unless otherwise directed) and free of spelling and grammatical errors. Allow time for proofreading, editing, and revision. As a student in communication, you have a responsibility to pay close attention to details and if your work contains blatant errors, expect a grade deduction.

Plagiarism and Academic Integrity – Any use in whole or in part of another person's work or ideas constitutes plagiarism and will result in an automatic failure in this course. Details of the SOC policy on this issue will be given to students and they are expected to understand and follow the policy. Students should always ask questions if they are not sure about the policy rather than risking a failing grade. The policy can be found at: <http://www.luc.edu/soc/Policy.shtml>. Remember, integrity is one of the most important traits for success. You control your own honor and integrity.

To maintain our culture of excellence and integrity, students are not to use AI assisted technology in the classroom unless they are specifically authorized to do so by their faculty for an assignment, a test, a quiz, or any deliverable that will be graded.

Performance Evaluation and Grading

In addition to project specifics, evaluation of assignments will use this rubric to ensure clear/consistent grading.

Grade Description

A range

Excellent analysis that critically examines topic; digs deep beneath the surface. Creative and innovative approach to the problem/question being considered. Outstanding content, clarity of writing and organization of research material.

Sophisticated, appropriate use of language. Thorough research and documentation of ideas, arguments, and comments. Free of mistakes: no typos; no misspellings; no punctuation or grammatical glitches; no errors of fact. All the necessary details, documentation, quotes, citations, and specifics are there.

B range

Very good attempt to link analysis to class themes, but more connections could be made. Very good to excellent; above average work and research. Some improvement needed in content, clarity, organization, or documentation. Occasional typos or other glitches say more about the lack of close proofreading than failure to master the mechanics of spelling, punctuation, and grammar. More details, quotes, citations, or examples needed. Errors of fact (incorrect spelling of a title, reference name, source, or date, etc.) show inattention to detail/accuracy although content is above average.

C range

Average analysis that lacks clear connections to class themes. Average, acceptable writing and research that meets basic expectations. Needs much work on content, clarity, organization, and documentation. Although basic facts most likely are there, lacks elaborating and supporting documentation or quotes. Errors indicate need for improvement in grammar, punctuation, spelling, and word usage: material was not proofread carefully. Errors of fact (incorrect spelling of a title, reference name, wrong source, date or page number, etc.) show inattention to detail and accuracy.

D range

Weak, unfocused work. Organization is below average, with numerous grammar, punctuation, and spelling errors. Documentation and details are scanty or superfluous, with errors of fact. Paper may reflect a lack of understanding of the assignment or a lack of research effort.

Grading Scale

(The grading policy is subject to change but it will be based on these guidelines.)

100-93% = A (300-279) 92-90% = A- (278-270) 89-88% = B+ (269-264)
87-83% = B (263-249) 82-80% = B- (248-240) 79-78% = C+ (239-234)
77-73% = C (233-219) 72-70% = C- (218-210) 69-68% = D+ (209-204)
67-63% = D (203-189) 62-60% = D- (188-180) 59% > = F (179-0)

Tentative Schedule

Week	Date	Topic	Assignments	Notes
1	Aug. 29	Introduction to class; what is research? Quantitative and qualitative research ; primary and secondary sources; Video - Trevor Noah, Everyone was wrong about Donald Trump		
2	Sept. 5	Data reporting example: Xylazine - how it was reported; public data sources; literature reviews and searches In-class links https://news.wttw.com/2023/01/25/cook-county-sees-17-spike-overdose-deaths-tied-veterinary-drug-xylazine-harm-reduction https://www.nytimes.com/2023/01/07/health/fentanyl-xylazine-drug.html Intro group project 1	Read Freakonomics, Chapter 4, Where Have All the Criminals Gone (pg. 120); Read Chapter Five in Quantitative Research Methods for Communication – on reserve in the Lewis Library;	

3	Sept. 12	<p>Business & Market Research; graphic type introduction; In-class work on group project 1</p> <p>In this initial set of classes, we get acquainted with an arc of inquiry that leads from questions and data to visual arguments using data</p>	<p>Read: Business and Market Research - Read Colleges & Universities in IBIS World Industry Market Research</p> <p>Read: How to Display Data Badly</p>	
4	Sept. 19	<p>Social media; group project 1 presentation and discussion</p>	<p>Read Intel Market Research Report on Social Media Trends 2023:</p> <p>Read: Matamoros-Fernández, A., & Farkas, J. (2021). Racism, Hate Speech, and Social Media: A Systematic Review and Critique. Television & New Media, 22(2), 205–224.</p> <p>Due: Group project 1</p>	

5	Sept. 26	<p>Government and political; Group project 2 assignment - This includes traditional charts (bar chart, line chart, etc), novel charting (sankey diagram, tree diagram, etc), and explanatory graphics and infographics. DataWrapper and Flourish demo.</p>	<p>Read Polling data from Pew Research piece</p> <p>Read Data reporting example: Blocked train crossings</p>	
6	Oct. 3	<p>Building your own data presentation featuring Jennifer Smith Richards; Q & A; project 2 work breakouts</p>	<p>Read the following links - https://www.propublica.org/article/illinois-school-police-tickets-fines</p> <p>https://www.propublica.org/article/students-police-arrests-illinois-garrison-school</p> <p>https://features.propublica.org/illinois-seclusion-rooms/school-students-put-in-isolated-timeouts/</p> <p>https://www.propublica.org/article/illinois-school-students-seclusion-rooms-methodology</p>	

7	Oct. 10	Mid-semester break; no class		
8	Oct. 17	Group project 2 presentations and discussion; Midterm review; individual tech tutor or session for free or freemium data viz tools based on vote; FOIA 101 presentation	Due: Group project 2	
9	Oct. 24	Final project introduction; Quantitative vs. qualitative research	Read: Qualitative Communication Research Methods: On Reserve at the Lewis Library- Chapters 5, 6, 7	
10	Oct. 31	Qualitative research methods; Ethnography; Group project 3 introduction	Read: Qualitative Methods in Business Research: Chapter 12 – Ethnographic Research Read: Goldberg, S. (2018). To Rise above the Racism of the Past, We Must Acknowledge It. National	

			Geographic. 4–6.	
11	Nov. 7	Focus Groups; group project 3 meeting	<p>Read Tadjewski, M. (2016). Focus groups: history, epistemology and non-individualistic consumer research. Consumption, Markets & Culture., 19(4), 319–345.</p> <p>Read: Focus Groups – Theory and Practice Chapter 7: Analyzing Focus Group Data</p> <p>Due: Group project 3</p>	
12	Nov. 14	Mixed Methods Content Analysis, Experiments, & Studies; group project 3 presentation	Read this article on a study regarding depression and social media use	
13	Nov. 21	Quantitative: Surveys; Story presentation: State government staffing ; group 3 project meet In-class reading	<p>Read Invisible Women: Introduction</p> <p>Watch the John Oliver Video on P-Hacking:</p>	

		State government staffing	Due: Bibliography	
14	Nov. 28	End of session review; individual tech tutor or session for free or freemium data viz tools based on vote		
15	Dec. 5	Mapping creatively; Data visualization types and uses; maps, timelines, charts and graphs	Read - The Folded Map Project Read - Using Maps to Tell the Story of How Americans Live	
16	Dec. 12	Final presentations	Due: Final presentation	

Academic Integrity

Loyola University Chicago takes seriously the issues of plagiarism and academic integrity. Below is an excerpt, quoted directly, of the university's statement on integrity. "The faculty and administration of Loyola University Chicago wish to make it clear that the following acts are regarded as serious violations of personal honesty and the academic ideal that binds the university into a learning community:

1. Submitting as one's own: Material copied from a published source: print, internet, CD-ROM, audio, video, etc.
2. Another person's unpublished work or examination material.
3. Allowing another or paying another to write or research a paper for one's own benefit.
4. Purchasing, acquiring, and using for course credit a pre-written paper.

The critical issue is to give proper recognition to other sources. To do so is both an act of personal, professional courtesy and of intellectual honesty."

Read through Loyola's full statement on Academic Integrity [here](#).

Additional Course Policies

Privacy Statement

In this class software will be used to record live class discussions. As a student in this class, your participation in live class discussions will be recorded. These recordings will be made available only to students enrolled in the class, to assist those who cannot attend the live session or to serve as a resource for those who would like to review content that was presented. All recordings will become unavailable to students in the class when the Sakai course is unpublished (i.e. shortly after the course ends, per the Sakai administrative schedule). Students who prefer to participate via audio only will be allowed to disable their video camera so only audio will be captured. Please discuss this option with your instructor.

The use of all video recordings will be in keeping with the University Privacy Statement shown below:

Assuring privacy among faculty and students engaged in online and face-to-face instructional activities helps promote open and robust conversations and mitigates concerns that comments made within the context of the class will be shared beyond the classroom. As such, recordings of instructional activities occurring in online or face-to-face classes may be used solely for internal class purposes by the faculty member and students registered for the course, and only during the period in which the course is offered. Students will be informed of such recordings by a statement in the syllabus for the course in which they will be recorded. Instructors who wish to make subsequent use of recordings that include student activity may do so only with informed written consent of the students involved or if all student activity is removed from the recording. Recordings including student activity that have been initiated by the instructor may be retained by the instructor only for individual use.

Copyright

Copyright law was designed to give rights to the creators of written work, artistic work, computer programs, and other creative materials. The Copyright Act requires that people who use or make reference to the work of others must follow a set of guidelines designed to protect authors' rights. The complexities of copyright law in no way excuse users from following these rules. The safest practice is to remember (1) to refrain from

distributing works used in class (whether distributed by the professor or used for research); they are likely copyright protected and (2) that any research or creative work should be cited according to [please insert standards appropriate to your discipline, e.g., MLA guidelines]. Read more about LUC's copyright resources online: luc.edu/copyright.

Intellectual Property

All lectures, notes, PowerPoints and other instructional materials in this course are the intellectual property of the professor. As a result, they may not be distributed or shared in any manner, either on paper or virtually without my written permission. Lectures may not be recorded without my written consent; when consent is given, those recordings may be used for review only and may not be distributed. Recognizing that your work, too, is your intellectual property, I will not share or distribute your work in any form without your written permission.

Student Support

Special Circumstances--Receiving Assistance

Students are urged to contact me should they have questions concerning course materials and procedures. If you have any special circumstance that may have some impact on your course work, please let me know so we can establish a plan for assignment completion. If you require assignment accommodations, please contact me early in the semester so that arrangements can be made with Services for Students with Disabilities (SSWD) (<http://www.luc.edu/sswd/>).