

**ENG 6808, Sec. 1 (19359)- Narrative Information Visualization (3 credits)
Spring 2021 Syllabus**

Instructor: Sonia Stephens

Meeting date/time: Thurs. 6:00-8:50, via Zoom

Office location: TCH 256A (I don't anticipate being in my office often this semester)

E-mail: sonia.stephens@ucf.edu or use Webcourses messaging

Zoom meeting room (for office hours): <https://ucf.zoom.us/j/3449826637>

Office hours: Wed 1:15-2:45, Thurs 2:00-3:30. Note: this is when I'll have my personal Zoom meeting room open. We can also meet by appointment (either via Zoom or Skype), and you are always welcome to e-mail me with questions.

Skype: soniahstephens (by appointment) **Phone:** (407) 823-5596 (dept. office, messages only)

Course Description

In this course, we will explore narrative information visualization, or how to tell visual stories about data. Narrative visualizations engage audiences and tell a story using features like interactive maps, infographics, and timelines. Visualization designers make choices about selecting and representing data, developing a narrative, and shaping their audiences' interpretation of the underlying information. This course is recommended for students who want to learn skills that can be applied to digital humanities, visual communication, science communication, and/or digital history projects. Examples could include mapping Orlando civil rights history, telling a story about trends in social media content, or visualizing the links between different fandoms.

This course has theoretical and hands-on components. You will first explore information visualization from an interdisciplinary perspective, learning how to understand and critique visualizations using rhetoric, critical theory, graphic design, and cognitive science concepts. You will then create a hands-on interactive visualization project using data of your choice. Projects may involve working with text, visuals, numerical data, or map-based data. No specific coding experience is necessary, as several "off-the shelf" tools are available to help build these projects.

Course Objectives:

- To understand theories of narrative information visualization from rhetorical, cognitive, and critical-theoretical perspectives.
- To become familiar with contemporary genres and trends in narrative visualization.
- To gain knowledge about data sources and tools for creating interactive visualizations.
- To develop technical skills for creating interactive visualizations.
- To be able to critique interactive visualization projects' structure and potential effects on audiences.

Required Texts:

- Catherine D'Ignazio & Lauren Klein, *Data Feminism*. MIT Press, 2020.
- Andy Kirk, *Data Visualisation: A Handbook for Data Driven Design*, 2nd Edition. SAGE, 2019.
- Other readings will be shared on our Webcourses site.

General Policies: Your participation in class discussions is required and is expected at every class Zoom meeting. This is a discussion-based, student-centered class; it only works if you are prepared and engaged. We will also be doing weekly online activities and discussions, and I expect you to check in to these at least once a week outside of our scheduled meetings. Full preparation includes reading assigned material and writing or thinking about it, as well as preparing course materials ahead of time. Discussion plays a vital role in this course, and unexcused absences will negatively affect your grade. As a matter of courtesy, please log in on time prepared to stay for the entire class. Be advised that we

will cover materials in class that are not included on the syllabus; you are responsible for all material covered during your absence.

All assignments are due by the announced date and time except in the event of a medical or personal emergency, or for one of the following reasons, which you should notify me about ahead of time (or as soon as possible):

- Religious holiday (please notify me during the first week of class)
- Authorized UCF/academic events (e.g., athletics, presenting work at an academic conference)
- Legal obligations (e.g., jury duty)

If you have a family or other personal emergency (which includes COVID-19 related issues), notify me as soon as possible so that we can discuss alternative arrangements. If you are a deployed active duty military student and will need an accommodation for this, contact me as soon as possible to discuss your circumstances.

I expect professionalism in all discussions. Sexist, racist, homophobic, or other derogatory remarks will not be tolerated. My top priority is to provide a safe environment for learning. You must have a KnightsMail account and check it regularly. I will use Webcourses messaging to contact the class on occasion, and I recommend you set it to forward e-mail to your KnightsMail account automatically. While I recognize that interruptions can occur during at-home videoconferencing, I ask that you try to plan ahead to avoid distractions as much as possible. As a matter of courtesy, do not record class activities without prior written permission from me.

All assignments are due by the announced date and time except in the event of a medical or personal emergency, or the exceptions noted above. For non-excused late work, 10% (one letter grade) will be deducted for each 24-hour period late until a grade of F is reached.

UCF COVID-19-related policies: To protect members of our community, everyone is required to wear a facial covering inside all common spaces including classrooms (see <https://policies.ucf.edu/documents/PolicyEmergencyCOVIDReturnPolicy.pdf>). Students who choose not to wear facial coverings will be asked to leave. If they refuse to leave the classroom or put on a facial covering, they may be considered disruptive. Faculty have the right to cancel class if the safety and well-being of class members are in jeopardy. Students will be responsible for material that would have been covered in class as provided by the instructor.

Students who believe they may have a COVID-19 diagnosis should contact UCF Student Health Services (407-823-2509) so proper contact tracing can take place. Students should not come to campus if they are ill, are experiencing any symptoms of COVID-19, have tested positive, or if anyone living in their residence has tested positive or is sick with COVID-19 symptoms. CDC guidance for COVID-19 symptoms is located at <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>.

If the instructor falls ill during the semester, there may be changes to this course, including having a backup instructor take over the course. Please look for announcements or mail in Webcourses@UCF or Knights email for any alterations to this course.

E-mail & contact: I encourage you to contact me via email or the Webcourses messaging system if you have any questions or concerns about the course. You should expect me to respond within 24 hours, longer on weekends or holidays. You must have a KnightsMail account and check it regularly. I request that you use common-sense e-mail etiquette to demonstrate professionalism: e.g., include a salutation, use full sentences and capitalization, and be sure to sign your name. Use one e-mail account

consistently: if I receive an unsigned e-mail from you and do not recognize the e-mail address, I may not respond to your message.

Academic Honesty: All work must be original by yourself for this course. Undocumented use of another's words, ideas, images, or other media is plagiarism, as is allowing someone else to write or edit your work for you. If you are caught plagiarizing, depending on the severity, you will fail the assignment. You also risk automatically failing the course, disciplinary referral to the appropriate dean, and possible expulsion from UCF. See the UCF Rules of Conduct (osc.sdes.ucf.edu/process/roc) for further information. Your work for this class should not substantially overlap with work in other courses; in other words, you should not re-use or duplicate your work from other courses for this class, and vice-versa. If you have questions about working on similar research topics for two courses, we can discuss this.

Financial Aid Activity: In order to document that you began this course, please complete the "Week 1" introductory discussion post by Friday at 4:59 pm on the first week of class, or as soon as possible after adding the course. Failure to do so may result in a delay in the disbursement of your financial aid.

Course Accessibility Statement: UCF is committed to providing access and inclusion for all persons with disabilities. This syllabus is available in alternate format upon request. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. Students who need accommodations must also be registered with Student Accessibility Services, Ferrell Commons 7F Room 187, phone (407) 823-2371, sas@ucf.edu.

Mandatory reporting and UCF Cares: As a professor, I have a mandatory reporting responsibility. This means that if you share information with me about sexual misconduct or crimes that may have occurred on campus, I am required to contact the appropriate UCF student support agency. If you prefer to remain anonymous and are seeking resources or support for yourself, a friend, or a classmate, you can also visit UCFCares.com for free services and information about a variety of student concerns. You can reach a UCF Cares staff member at ucfcares@ucf.edu or call (407) 823-5607 between 8am and 5pm. If you are in immediate distress, UCF offers counselors 24/7 at (407) 823-2811 (then press #5).

Campus Safety: Most campus emergencies primarily affect courses that meet in person, but the following policies apply to students in online courses. In case of emergency, call 911. To stay informed about emergency situations, sign up for UCF text alerts at my.ucf.edu ("Student Self Service" > "Personal Information" > "UCF Alert"). If you have a special need related to emergency situations, please email me or talk to me during office hours. Consider viewing this UCF video about active shooter situations: goo.gl/ygJkjy (shortened link).

Copyright: This course may contain copyright-protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, or distribute these items outside of the classroom environment. All copyright materials are credited to the copyright holder.

University Writing Center: The UWC is available for all students to assist with writing. See <http://uwc.ucf.edu/> for details.

Grading

Grading: Your grade will be determined by the following:

- *Class participation (5%):* In-class engagement, peer feedback.

- *Discussion posts (10%)*: Most weeks, we will have an online discussion and/or activity related to the class reading.
- *Data visualization commentaries (6%)*: We will build a class reference and commentary on: 1) insightful or provocative data visualizations, 2) example datasets for potential project use, and 3) tools that may help us construct visualizations.
- *Data log & presentation (8%)*: Weeks 2-8; keeping a log of personal data and sharing weekly visualization sketches of those data.
- *Project proposal (15%)*: Describe your plan for your infovis project, including questions to answer, data sources, type of software/coding to be used, narrative structure, interaction design, and planned appearance. You will need to draw on theory readings to defend your preliminary choices.
- *Project progress report (10%)*: Describe what you have accomplished, tasks and challenges remaining, any shifts in execution or modifications, and plans for completion.
- *Information visualization project (18%)*: You will research and construct a narrative interactive visualization using data and software of your choice. Possible starting points for this project include a specific dataset, visualization genre, topical situation or question, or theoretical argument. Regardless of starting point, you are expected to give thoughtful consideration to all the aspects of design we cover in the course.
- *Project reflection (18%)*: This will be a 10-12 page (double-spaced) scholarly paper describing the empirical construction and theoretical justification for your project.
- *Project presentation (10%)*: During our scheduled finals day, you will prepare a presentation of your project's goals, theoretical background, development process, and final outcome.

Grade Scale (%): 94-100 = A 93-90 = A- 89-87 = B+ 86-83 = B 82-80 = B- 79-77 = C+
 76-73 = C 72-70 = C- 69-67 = D+ 66-63 = D 62-60 = D- >60 = F

No Incompletes or extra credit will be given in this course.

Written Grading Standards:

- An A text is exceptional. It presents sophisticated and significant critique and is guided by a meaningful argument. It contains the required elements of the assignment, is written in an engaging style, is arranged in a logical manner, is memorable, and is visually appealing. It is free of mechanical errors.
- A B text is strong. It contains all required elements of the assignment. It is generally above average in terms of the criteria mentioned above, but falls short of excellence in one or more category. It has only minor mechanical errors.
- A C text is competent. It contains all required elements of the assignment. It is generally average in terms of the major criteria listed above. It has a few mechanical errors.
- Low C or D work is weak. It does not include the required elements of the assignment and it falls below average in terms of one or more of the major criteria.
- F work fails in terms of one or more of these criteria.

Note: *The schedule of readings below may change. Changes to the syllabus or schedule will be made at my discretion and will be announced in class and posted to Webcourses.*

Week	Date	Topic/activity	Reading	Minor assignment	Major assignment
1	1/14	intro to course, examples	-	intro discussion post	
2	1/21	two perspectives on data visualization	D'Ignazio & Klein Intro; Kirk Intro + Epilogue (~37 pp)	data log entry, discussion post	
3	1/28	process I	Kirk Chs 1 & 2 (~42 pp); Segel & Heer	data log entry, viz example commentary	
4	2/4	data and power	D'Ignazio & Klein Ch 1 (~28 pp); Eichberger	data log entry, tool commentary	
5	2/11	process II	Kirk Ch 3 (~34 pp); Stephens & Richards	data log entry, dataset commentary	
6	2/18	challenging power; emotion & embodiment	D'Ignazio & Klein Chs 2 & 3 (~55 pp)	data log entry, discussion post	
7	2/25	working with data; editorial thinking	Kirk Chs 4 & 5 (~38 pp)	data log entry, discussion post	
8	3/4	what gets counted; pluralism	D'Ignazio & Klein Chs 4 & 5 (~55 pp)	data log entry	project proposal
9	3/11	data representation	Kirk Ch 6 (~65 pp incl. example gallery); Tversky	discussion post	
10	3/18	context	D'Ignazio & Klein Ch 6 (~22 pp); Hayman et al	discussion post	
11	3/25	interactivity; annotation	Kirk Chs 7 & 8 (~45 pp); Rawlins & Wilson	discussion post	
12	4/1	design	Kirk Chs 9 & 10 (~55 pp)	-	project progress report
13	4/8	labor; evaluation	D'Ignazio & Klein Ch 7, conclusion, values & metrics (~44 pp)	discussion post	
14	4/15	Spring break (no class)			
15	4/22	tools; evaluation	Drucker & Svensson; Kosara; Plaisant	-	project & reflection due
finals	4/29	finals week (7:00-9:50 pm)	-	-	project presentations

Other deadlines: Add/drop/swap 1/15; Withdrawal 3/26