NEJS 123a - Maps, Graphs and Timelines: Technology and Design in Historical Research

Alexander Kaye

akaye@brandeis.edu

T,Th 2:20–3:40 pm.

Lown 103

Contact Details

Instructor: Alexander Kaye (NEJS)

Office location: The Mandel Center for the Humanities rm. 307

Email: alexanderkaye@brandeis.edu

Email is the best way to contact me. I will endeavour to respond within 24 hours (excepting weekends and university or religious holidays).

Office hours will be held online on Thursday 12-1 pm., or at other times by appointment, either virtually or in-person. *Please sign up for a slot in office hours in advance.*

Course Information

Course Description

This course will teach students to use digital tools such as graphs, maps, timelines, and text analysis to enhance their scholarship in the humanities. Students will use data drawn from their own areas of interest so this course will support any program of study in the university.

In addition to learning how to use these digital tools, students will also learn how to think *about* digital visualization: What insights can be gleaned from a timeline or a map that cannot be gleaned from a simple paragraph of text? How does digital visualization help us to make connections that we might otherwise miss? What opportunities does digital visualization offer for increasing accessibility for people with disabilities or people from disadvantaged groups? Finally, students will learn how to analyze and critique representations of data from a variety of sources, to learn from the best practices of other scholars and to be able to identify shortcomings such as implicit bias in the selection of sources and the representation of data.

Every student will produce their own work of digital visualization based on their own research interests. (This might be, for example, a graphic timeline of the life of Muhammad, a network map of letters between Jewish women in the 19th century, an interactive annotation of a Hebrew

poem, a word cloud analysis of the Fiqh,and so on.) The best projects will be featured on the department's website and will be a showcase of the talents of Brandeis students.

The skills taught in this course are highly prized in the job market and are applicable to a wide variety of professions as well as further study in graduate school and beyond.

Learning Goals

This course is intended to fulfill requirements in the Foundational Literacies of Digital Literacy and Oral Communication.

After this course, students will:

1. Learn practical skills in the digital visualization of data in various fields in the humanities, using tools such as timelines and maps, and acquiring the ability to create websites.
2. Appreciate the potential of the digital humanities for enhancing research and the opportunities it provides for increasing accessibility to scholarship.
3. Learn how to analyze the digital humanities, and to critique its engagement with issues of accessibility, gender, and race.

Credit Hours

Success in this 4 credit course is based on the expectation that students will spend a minimum of 9 hours of study time per week in preparation for class (readings, papers, discussion sections, preparation for exams, etc.)

Course Requirements

Academic Integrity

Every member of the University community is expected to maintain the highest standards of academic integrity. A student shall not submit work that is falsified or is not the result of the student's own effort. Infringement of academic honesty by a student subjects that student to serious penalties, which may include failure on the assignment, failure in the course, suspension from the University or other sanctions (see section 20 of R&R). Please consult Brandeis University Rights and Responsibilities for all policies and procedures related to academic integrity. Students may be required to submit work to TurnItIn.com software to verify originality. A student who is in doubt regarding standards of academic honesty as they apply to a specific course or assignment should consult the faculty member responsible for that course or assignment before submitting the work. Allegations of alleged academic dishonesty will be forwarded to the Department of Student Rights and Community Standards. Citation and research assistance can be found at Brandeis Library Guides - Citing Sources (https://guides.library.brandeis.edu/c.php?g=301723).

Class Conduct

Study in the humanities entails grappling with big ideas about human thought, belief, behavior, and practice. Therefore, any course in history is bound to be the site of different opinions. Collegial debate is welcome, but aggressive behavior has no place in our classroom. Please exercise respect for your colleagues.

Assignments and Class Attendance

Class attendance is required. Two unexcused absences will be overlooked without penalty. More than two unexcused absences might result in a grade penalty.

Students are expected to listen actively and attentively, and to respond thoughtfully and constructively during class discussions, when appropriate.

All readings and assignments must be completed *before* the session for which they were assigned. **If an assignment is listed in the syllabus under a particular date, it must be submitted by midnight of the previous day.**

Unless excused, late assignments will not be accepted and will receive a grade of zero. Extensions will not be granted except in the case of an emergency situation. **If you feel you are falling behind for any reason, please do not hesitate to reach out to the instructor.**

The course will be managed through Google Classrooms.

Evaluation

Requirements for the course include:

Attendance, Preparation and Active Participation	15%
Exercises and assignments	35%
Final project	50%

There will be no mid-term or final examination.

Essential Resources

Accommodations

Brandeis seeks to welcome and include all students. If you are a student who needs accommodations as outlined in an accommodations letter, I want to support you. In order to provide test accommodations, I need the letter more than 48 hours in advance. I want to provide your accommodations, but cannot do so retroactively. If you have questions about documenting a disability of requesting accommodations, please contact Student Accessibility Support (SAS https://www.brandeis.edu/accessibility/) at 781.736.3470 or access@brandeis.edu.

Course Materials

All course readings will be provided by the instructor, or may be found online. As much as possible, course materials will be open access, or available for free to students through the university library.

If you are having difficulty purchasing course materials, please make an appointment with your Student Financial Services or Academic Services advisor to discuss possible funding options and/or textbook alternatives.

Apps and equipment

LATTE is the Brandeis learning management system: http://latte.brandeis.edu. Login using your UNET ID and password.

This course will be hosted on its own Google Classroom site. You will be given instructions about how to sign up for the class's site.

In this course, we will be exploring various technologies used in the digital humanities. All software we will use will be available for free to students. Students should have access to a computer (or other device) which has the ability to record video and audio.

Library

The Brandeis Library collections and staff offer resources and services to support Brandeis students, faculty and staff. These include workshops, consultations, collaboration, materials and instruction on emerging trends in technologies such as machine learning, emerging trends in research such as data visualization, and emerging trends in scholarship such as open access. Librarians at the Circulation Desk, Research Help Desk, Archives & Special Collections, Sound & Image Media Studios, MakerLab, AutomationLab, and Digital Scholarship Lab are available to help you. https://www.brandeis.edu/library/about/index.html

Student Support

Brandeis University is committed to supporting all our students so they can thrive. The following resources are available to help with the many academic and non-academic factors that contribute to student success (finances, health, food supply, housing, mental health counseling, academic advising, physical and social activities, etc.). Please explore the many links on this Support at Brandeis page (https://www.brandeis.edu/support/undergraduate-students/browse.html) to find out more about the resources that Brandeis provides to help you and your classmates to achieve success.

Teaching Continuity

Email is the best way that I have to communicate with you outside of class. Even if email is not your usual mode of communication, please make sure that you check it every day in case the instructor needs to get in touch with you. Similarly, please make check Latte frequently so that you are aware of announcements about the course.

This course will be taught entirely online but it would in any case be wise to keep yourselves informed of possible changes and disruptions that might arise as a result of COVID-19. See Teaching Continuity at https://www.brandeis.edu/teaching/teaching-continuity.html).

Technology policy

The evidence increasingly suggests that most students produce better work and receive higher grades when taking notes by hand rather than using a laptop. For this reason, even though you will be sitting in front of a computer for your virtual meetings, I recommend that you consider taking notes by hand.

During our virtual meetings, please resist the urge to check email or social media, or engage in other behaviour that will distract you from class. The urge to loose focus is very strong but please do everything you can to make sure you are focussed on class during the time that we meet.

Course Resources

During the course, you will spend a lot of time experimenting, exploring, analyzing and assessing digital humanities projects on the web. The resources below give you some places to start as you are looking for DH resources to study. You are never limited to this list, however. Follow your curiosity and interests to wherever you want to go.

Syllabi and curricula on the web

Some of the material in this syllabus has been drawn from the curricula of experts in the digital humanities. For further reading, I encourage you to explore their websites. For example:

"Clio Wired", Dan Cohen (Northeastern University)

"Approaching Digital Humanities", Michael J. Kramer (Middlebury College)

"Introduction to the Digital Humanities", Miriam Posner (UCLA)

A Selection of Digital Humanities Resources

Simmons University Library Guide on Digital Humanities. (Good selection of resources broken down by subject eg. "Gender", "Religion", etc.)

The Metropolitan Museum of Art (NY), Online Features

Many Eyes

Gross National Happiness

Feltron reports

Anatomy of a Web Map

Brandeis Library, Finding Maps in Digital Collections & Databases

Will Thomas and Edward Ayers, "The Difference Slavery Made: A Close Analysis of Two American Communities," http://www.vcdh.virginia.edu/AHR/

Hypercities

PhilaPlace

Euclid Corridor History Project

Any of the sites at this database of Jewish Digital Humanities projects, compiled by Michelle Chesner, Jewish Studies librarian at Columbia University

Diarna: Geo-Museum of North African and Middle Eastern Jewish Life

Footprints: Jewish Books through Time and Place

Digital Islamic Studies Project, Brown University

Unesco World Heritage - Interactive Map

Any of the exhibits at Omeka at Brandeis

Memories/Motifs: Holocaust Survivor Narratives in Postwar America

Arabic language text corpora. See the list by Ayman Eddakrouri, at the American University in Cairo.

Hebrew and Jewish text corpora. See the list at the Brandeis Libraries Judaica Research Guide.

The Sefaria Library

Digitized newspaper archives available at Brandeis Library

English Language Corpora

Mapping the Republic of Letter (Stanford University)

Ben Fry, The Preservation of Favoured Traces

Lectures and Readings

Unit 1. Introductory explorations

Thu 25 Aug

Check out the following sites:

Listen to Wikipedia

Mapping Historical New York: A Digital Atlas

add text-based project here

Assignment (Due next class)   For each of the websites we have explored today, write *brief* answers to the following questions (bullet form is fine.):

- What are some questions you would like to "ask" of the data?
- What is missing in the data that you wish was there?
- Are there other bodies of data that you think it would be helpful to combine with the data already provided? Where would you look to find that new data?
- Are any biases present in the data? Are any biases present in the questions you are asking about it?
- Start brainstorming about other bodies of data that you might be interested in exploring.

Tue 30 Aug What is "Digital Humanities?"

https://whatisdigitalhumanities.com/ (Visit this site and refresh the page several times. You'll see what I mean. . .)

Anne Burdick "A Short Guide to the Digital Humanities," in *Digital humanities*, ed. Anne Burdick et al. (Cambridge, Mass.: MIT Press, 2012), 121–35.

Anne Burdick "Humanities to Digital Humanities," in *Digital humanities*, ed. Anne Burdick et al. (Cambridge, Mass.: MIT Press, 2012), 1–26.

Unit 2. Big Data

Thu 01 Sep

Take a look at Google Ngrams. Play around with it. Make some notes about what you found and bring them to class.

Sandra Álvaro "Big Data and Digital Humanities: From Social Computing to the Challenges of Connected Culture," *CCCB LAB* (blog), October 23, 2013.

Tim Hitchcock "Big Data for Dead People: Digital Readings and the Conundrums of Positivism," *Historyonics* (blog), December 9, 2013.

Tue 06 Sep Guest: Laura Hibbler, Brandeis Associate University Librarian for Research and Instruction

How to assess the credibility of digital information.

Thu 08 Sep Guest: Prof. Jordana Goodman, Boston University School of Law

The benefits and pitfalls of numbers and statistics in digital humanities research

Unit 3. Close Reading and Distant Reading

Tue 13 Sep

Michael J. Kramer "Writing On The Past, Literally (Actually, Virtually)," February 4, 2014.

Andrew Goldstone, "Teaching Quantitative Methods: What Makes It Hard (in Literary Studies)"

Todd Presner "The Ethics of the Algorithm: Close and Distant Listening to the Shoah Foundation Visual History Archive," in *Probing the Ethics of Holocaust Culture*, ed. Claudio Fogu, Wulf Kansteiner, and Todd Presner (Harvard University Press, 2016), 175–202.

Thu 15 Sep Guest: Natalie Sussman, Brandeis Digital Literacy Instruction Librarian

Processing large corpora. (Where to find your corpus, how to refine it, what questions to ask of it, what tools and methods to use.)

Tue 20 Sep Experiments with language processing

Be sure to bring a computer to class today

Unit 4. Digital Visualization in the Humanities

Thu 22 Sep

Elizabeth Hill Boone "Aztec Pictorial Histories: Records Without Words," in *Writing Without Words: Alternative Literacies in Mesoamerica and the Andes*, ed. Elizabeth Hill Boone and Walter Mignolo (Duke University Press, 1994), 50–76.

Clive Thompson "The Surprising History of the Infographic," Smithsonian, July 2016. [Link]

Daniel Rosenberg and Anthony Grafton *Cartographies of Time: A History of the Timeline* (Princeton Architectural Press, 2013).

R. J. Andrews, "Map of Firsts: An interactive timeline of the most iconic infographics"

Thu 29 Sep Guest: Alex Willett Brandeis GIS and Social Sciences Librarian

How and where to find data

Tue 04 Oct Experimenting with digital visualization

Unit 5. Mapping

Thu 06 Oct

Anatomy of a Web Map

Explore at least two of the following sites:

- Brandeis Library, Finding Maps in Digital Collections & Databases
- Persuasive Maps (Cornell University Library)
- Will Thomas and Edward Ayers, "The Difference Slavery Made: A Close Analysis of Two American Communities," http://www.vcdh.virginia.edu/AHR/
- Hypercities](http://hypercities.com/)
- PhilaPlace
- Euclid Corridor History Project

Tue 11 Oct Guest: Alex Willett

How, why (and why not) to use digital maps

Unit 6. Human bias, computational bias

Thu 20 Oct Race, Racism and Anti-Racism

Hannah Fry, Royal Institution Christmas Lectures, 2019 (Watch from 27:13 to 35:30)

Safiya Umoja. Noble *Algorithms of oppression: how search engines reinforce racism* (New York: New York University Press, 2018). (Selections)

Explore the following projects:

- https://www.media.mit.edu/projects/algorithmic-justice-league/overview/
- https://www.media.mit.edu/projects/gender-shades/overview/
- https://www.ted.com/talks/joy_buolamwini_how_i_m_fighting_bias_in_algorithms

Tue 25 Oct Gender and Sexuality

Clive Thompson "The Secret History of Women in Coding," *The New York Times*, February 13, 2019, sec. Magazine.

Introduction to *Bodies of Information: Intersectional Feminism and Digital Humanities* by Jacqueline Wernimont and Elizabeth Losh

Thu 27 Oct Guest: Prof. Sabine von Mering

Monika Hübscher and Sabine von Mering, eds. *Antisemitism on Social Media* (Milton: Taylor and Francis, 2022).

Unit 7. Project design and accessiblity

Tue 01 Nov

George H. Williams "Disability, Universal Design, and the Digital Humanities," in *Debates in the Digital Humanities*, ed. Matthew K. Gold, NED - New edition (University of Minnesota Press, 2012), 202–12.

Thu 03 Nov Guest: Natalie Sussman

Methods and tools: How to build an accessible platform to present your final project

Visits from DH Practitioners and Scholars

Tue 08 Nov Sara Wolkenfeld (*Sefaria*)

Thu 10 Nov Prof. Frances Malino (*Digital Heritage Mapping and Diarna project*)

Unit 8. Preliminary presentations and class feedback

Tue 15 Nov

Thu 17 Nov

Unit 9. Supervised work on final projects

Tue 22 Nov

Tue 29 Nov

Unit 10. Concluding conversations and presentations

Thu 01 Dec

Tue 06 Dec

Assignments

Assignment 1: Preliminary Thoughts

Visit https://whatisdigitalhumanities.com/[What is Digital Humanities?] and refresh the page several times.

- Offer your own definition of "digital humanities".
- How do you think the digital humanities might be helpful in terms of adding to our knowledge, understanding, and enhancing social values (justice, equality, freedom. . .)?
- How do you think the digitla humanities might impede adding to our knowledge, understanding, and enhancing social values (justice, equality, freedom. . .)?
- How has digital technology affected online learning today? How has COVID-19 altered the way we think about online learning? How have technological advances in general (eg access to copmuters; the way we use smartphones today etc.) changed the way we learn? You might want to skim through some of the relevant articles at The Chronical of Higher Education.

Assignment 2: Beginning preparation for the final project

This assignment is designed to get you to start thinking about your final projects. Even though the project will not be due until the end of the semester, some aspects of your research, especially choosing an appropriate topic and gathering useable data, may take soem time. So it is important that we get started early in the semester.

The answers to this assignment will be given to Alex Willett, one of the librarians who specialize in DH, so that they can begin thinking about how to help you in your research. Treat this as an opportunity to begin a conversation with someone who will be an important resource for you as you pursue your research.

- Prepare two or three ideas that you are considering for your final projects. For each idea, answer the following questions:

    - What questions are you interested in answering?
    - What do you think DH tools will contribute to your research? What are you hoping to achieve in either the research or the presentation of your findings that DH will be useful for?
    - What are you concerned or unsure about?
    - What kind of DH tools would you like to use (eg. mapping, timelines, podcasting, videos, text processing. . .)
    - What kind of data will you need for your project? Where will you look for it? What help do you need in trying to find it?

Assignment 3: Experimenting with data visualization

- Experiment with data visualization. Pick any topic (the history of the violin; the eating habits of your rabbit; religious life in Macau. . .) and experiment with representing information about that topic visually. You might choose to use a timeline, graphs, or any other graphical representation. Experiment - this should be fun.
- Some tools you might consider using include:

    -

- Write about 500 words about your experience. What did it feel like to present information in this way? How did it compare to writing an essay about the same topic? What was gained and what was lost in presenting information in this way?

Assignment 4: Voyant

- Pick any readings from the course so far (or any other reading on the topic, if you prefer.) You should use texts that add up to at least 5000 words.
- Before using Voyant, write about 100 words (note form is OK) about what you think the computer analysis will reveal about the readings.
- Then enter the texts into Voyant and experiment with its different tools.
- Write about 500 words about what you learnt from the computational analysis using Voyant. Were your earlier expectations confirmed or challenged? How did Voyant help you in your understanding or analysis of the texts?

Assignment 5: Gender, Race and Accessibility

Choose any digital humanities project. You can find one from the list included in the "Resources" section of the syllabus, or by looking through the databases listed there, or just find one one your own. Create a video 5-7 minutes in length, in which you address the questions below. You might like to accompany your video with slides using Zoom "screenshare" or Echo360.

- How does the project describe itself and its goals? (If it does not offer a description, desribe it in your own words.)
- Where does the project succeed in its goals and where does it fail?
- What does the use of technology add to the project? Is it integral to the project or more superficial? What are the costs and benefits of the use of technology in this case?
- What choices did the authors of the project make in terms of what data to display, how to display it, how to interpret it, etc? What are the costs and benefits of these choices?
- Assess the project in terms of its engagement (implicit or explicit) with issues of gender, racial equity and accessibliity.