Week 1: Introductions

Thursday Sept 8: Initial Meeting

Activity: Orientation to class

Worksheet: access to computing stuff.

Readings (aloud in class):

• John Winthrop, from "A Model of Christian Charity" (http://winthropsociety.com/doc_charity.php)

Give Assignment: Mental Maps of students' neighborhoods

Unit 1: Maps, Texts, Networks

Week 2: Maps

Monday Sept 12: Short History of Boston

Activity: Investigate historical maps at the Leventhal Map Center

Readings Due:

- Robert Allison, A Short History of Boston, chapters 1-3
- Nedra Reynolds, "Maps of the Everyday: Habitual Pathways and Contested Places"
- → **Before next class:** install QGIS (http://www.qgis.org/en/site/) and the Open Layers plugin. See instructions for both at http://programminghistorian.org/lessons/qgis-layers
 - · Download files for Thursday's in-class workshop

Wednesday, September 14

Assignment Due: Mental Maps

Thursday Sept 15: GIS

Activity: Georectification in GIS

Readings:

- Denis Wood, "A Map is an Image Proclaiming Its Objective Neutrality"
- Mark Monmonier, "Lying with Maps"

Useful Resources:

• Jim Clifford, Josh MacFadyen, and Daniel Macfarlane, "Georeferencing in QGIS 2.0" (http://programminghistorian.org/lessons/geoqgis) and "Creating New Vector Layers in QGIS 2.0" (http://programminghistorian.org/lessons/vectorlayers-qgis)

Give assignment: Shoreline and Streetcar Tracing in GIS

Week 3: Texts

Monday Sept 19: Data is Data

Activity: Read census data schema 1800-2000 and individual census records for NU area Readings:

- SHB, chapter 4
- danah boyd and Kate Crawford, "Critical Questions for Big Data" (http://www.tandfonline.com/doi/abs/10.1080/1369118X.2012.6,
- Number Crunching without Programming: The Evolution of Spreadsheet Usability. Martin Campbell-Kelly
- A Spreadsheet way of knowledge: Stephen Levy, Harper's Magazine, 1984

Thursday Sept 22: NU Histories

CHANGE OF LOCATION: Northeastern Archives, Snell 90SL

• Short History of Boston, chapters 1-4, adjusted due date.

Activity: Northeastern Archives and Special Collection

Give Assignment: Investigating an Archival Data Source

→ Before next class: install Gephi (https://gephi.org/)

Week 4: Networks

Monday Sept 26: The Hub of the Universe

Activity: The structure of networks and network data

Readings:

- Oliver Wendell Holmes, from "The Autocrat of the Breakfast-Table" http://www.theatlantic.com/magazine/archive/1858/04/the-autocrat-of-the-breakfast-table/304375/); read only to the line "All are but parts of one stupendous HULL!"
- Browse the Boston-themed issue of *Life* magazine from October 19, 1911. In particular, read "Hail Boston!" (pg. 653), "Boston Expurgata" (pg. 657), "Boston" (pg. 665), "The Cerebral City" (pg. 666), and the comics on pgs. 668-669 (https://books.google.com/books?id=pr5GAQAAIAAJ&pg=PA645#v=onepage&q&f=false)
- Scott Weingart, "Demystifying Networks, Part I & II" (http://journalofdigitalhumanities.org/1-1/demystifying-networks-by-scott-weingart/)

5pm Assignment Due: Shoreline and Streetcar Tracing in GIS

Thursday Sept 29: Six Degrees of Paul Revere

Activity: Visualizing the Sons of Liberty network using Gephi

Readings:

• Vannevar Bush, "As We May Think" (http://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/) — Kieran Healy, "Using Metadata to Find Paul Revere" (https://kieranhealy.org/blog/archives/2013/06/09/using-metadata-to-find-paul-revere/)

Unit 2: Visualization

Week 5: Viz

Monday October 3: History of Visualization

Activity: Sorting history of visualizations

Readings:

- Edward Tufte, Envisioning Information
- Selections from Bostonography the blog (http://bostonography.com/), posted online.
- Mushon Zer-Aviv, "If Everything is a Network, Nothing is a Network", http://visualisingadvocacy.org/blog/if-everything-network-nothing-network

Thursday October 6: Designing for 3D Printing

Activity: Design workshop

**Note:

Readings:

- Review Tufte and browse, reading a few items in detail, http://bostonography.com/.
- OPTIONAL: Johanna Drucker, "Humanities Approaches to Graphical Display" (http://www.digitalhumanities.org/dhq/vol/5/1/oo
- OPTIONAL: Jim Miller, "Is Bad Writing Necessary?"

Friday, October 7: Assignment Due, Final Project Idea Post #1

Unit 3: Education

Monday, October 10: Assignment Due, Investigating an Archival Data Source

Week 6: Boston Data

Monday October 10: No class, Columbus Day

Thursday October 13: Data Field Trip to the Boston Globe

Readings: data journalism exemplars.

Spotlight "Shadow Campus" report on student housing in Boston; Pulitzer prize finalist

- Read part 2 and part 3. Pay attention to what sort of data they use and how they present it; look for Northeastern's place there and in the interactive database.
- Also browse the main web page for the full spotlight series. on the shadow campus.

Also for context, look at two other pieces of data journalism.

- Spies in the skies, Buzzfeed news
- Arresting Words, Boston Globe

Week 7: Not Reading A to X

Monday October 17: Computational Reading

→ For Monday: install Rstudio (https://www.rstudio.com/). Installation instructions online under "Handouts."

In-class discussion: data journalism debriefing.

Readings:

- Michel et al, "Quantitative analysis of culture using millions of digitized books"
- James F. English and Ted Underwood, "Shifting Scales Between Literature and Social Science"

Thursday October 20: Text by the numbers

Note: You *do not* need to read Henry Adams and Malcolm X before class. You *must* have installed Rstudio on the computer you bring to class following the instructions here

Activity: Text analysis of opening chapters of of Henry Adams and Malcolm X.

Lecture/Activity: The statistics of text

Week 8: Education

Monday October 24: Class cancelled.

Thursday October 27: Distant and close Boston bios

Readings:

- Henry Adams, "Quincy" and "Boston" from The Education of Henry Adams (http://xroads.virginia.edu/~hyper/HADAMS/ha_hon
- Malcolm X, "Homeboy," "Laura," "Caught," and "Satan" from The Autobiography of Malcolm X

Give Assignment: Not Reading a Bostonian Biography

Week 9: Busing in Boston

Monday October 31:

Activity: Plotting data in R — the grammar of graphics

Readings:

- J. Anthony Lukas, Common Ground, chapters 14-18
- Watch, "Evening Compass" 09/09/1975, beginning of clip to 6:41(http://bostonlocaltv.org/catalog/V_TBHJ42XIAXAZOY2) and student interviews in "English High School" (http://bostonlocaltv.org/catalog/V_NMEQDOV40EIR1F6)

Thursday November 3

Readings:

- Watch John Oliver on School Desegregaton today.
- J. Anthony Lukas, Common Ground, chapters 19-24
- Watch, "Boston School Desegregation Review" (http://bostonlocaltv.org/catalog/V_ECWKOMHK3Z1X86O)

In class:

• Америка 70-х: Бостонские контрасты (Now in class)

Give Assignment: Blue Sky Proposal/Final Project

Unit 4: Politics

Week 10: Election Week

Monday November 6

Assignment Due, Final Project Idea Post #2

Activity: Merging data and exploring residential segregation.

Readings: - The Big Sort: Chapters 1, 2

Activity: Principal Components Analysis and election results (RStudio). Lecture: Principal Components and political polarization.

Thursday November 10

Readings: - The Big Sort, 10

TBD: Election results.

Friday November 11: Assignment Due, Not Reading

Unit 5: Social Engagement and the City

Week 11: Civics and the Web

Monday November 14: Final Project Workshop

Assignment: bring your two ideas from your two ideas assignments. Be ready to make a brief pitch to the class.

- Workshop ideas into project proposals
- Identify potential collaborations
- Outline a plan of work
- Looking toward Blue Sky Proposal/Final Project Contract

Thursday November 17: Data Field Trip

Activity: TBD/Field Trip to City Hall

Friday, November 18: Assignment Due, Blue Sky Proposal/Final Project Contract

Week 12: Social Media Activism

Monday November 21: #blacklivesmatter and #ferguson

Activity: Guest Lecture by Prof. Brooke Foucault Welles from 12:30-1:25

Readings:

Moya Bailey, "Redefining Representation: Black Trans and Queer Women's Digital Media Production"
— Sarah J. Jackson & Brooke Foucault Welles, "#Ferguson is everywhere: initiators in emerging counterpublic networks"

Thursday November 24: No Class, Thanksgiving

Week 13: Social Media Text Analysis/Twitter bots?

Monday November 28: 3 Laws of Twitter Robotics

- Rob Dubbin, "The Rise of Twitter Bots" (http://www.newyorker.com/tech/elements/the-rise-of-twitter-bots)
- Mark Sample, "A Protest Bot is a Bot So Specific You Can't Mistake It for Bullshit" (https://medium.com/???#.8bjcxnp7x)
- http://arstechnica.com/the-multiverse/2016/06/an-ai-wrote-this-movie-and-its-strangely-moving/
- https://vimeo.com/9790850 in class
- Bots as abusers

Thursday December 1: The Social Media Marathon

Debate: How much news is fit to print?

Activity: Parsing Twitter data-how is it assembled? How do you get from native to structured like we want?

Thursday December 1: Bots due before class as described in assignment

Readings:

- Kate Starbird et al, "Rumors, False Flags, and Digital Vigilantes: Misinformation on Twitter after the 2013 Boston Marathon Bombing" (https://www.ideals.illinois.edu/bitstream/handle/2142/47257/308_ready.pdf?sequence=2&isAllowed
- Yu-Ru Lin and Drew Margolin, "The ripple of fear, sympathy and solidarity during the Boston bombings" (http://epjdatascience.springeropen.com/articles/10.1140/epjds/s13688-014-0031-z)

Week 14: Wrapping Up

Monday December 5: Final Project Work-in-Progress Presentations

** No final exam **

^{**} Final Projects due Dec 12, 2016 at 10:00am **