# ESSENTIAL READINGS IN DIGITAL HUMANITIES
## MATT ERLIN & MELANIE WALSH
## SPRING 2018

## DESCRIPTION

This seminar will offer students with a background in the humanities an overview of current discussions and debates in digital humanities, with a particular emphasis on concrete examples of successful computationally-assisted literary and cultural analysis. We will review a variety of topics, including text mining, network analysis, GIS, and data visualization, as well as addressing theoretical issues related to the practice of digital humanities and its relation to traditional methods of humanistic inquiry. A one-hour weekly lab will introduce students to some introductory tools and packages that will help get them started on their own projects. Prerequisite: one 300-level course dealing with literature, history, or philosophy.

## COURSE INFO:

| Instructors: | Matt Erlin | Melanie Walsh |
|---|---|---|
| Course Times: | Thursdays 10-12pm | Mondays 12-1pm |
| Course Locations | Lopata House 10 | Eads 004 |
| E-mail: | merlin@wustl.edu | melanie.walsh@wustl.edu |
| Office: | 321 Ridgley | Eads 004 |
| Office Hours: | M 1:00pm-3:00pm | M 2:00pm-4:00pm |

## TEXTS:

All required readings will be available on Blackboard. Many of the texts are also freely available on the web. Check the bibliography for more information.

## ASSIGNMENTS:

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| Participation: | 10% |
| 3 response papers | 30% |
| 3 lab assignments | 30% |
| Final paper | 30% |

Class Participation

This course is conceived as a seminar, not a lecture, although I will occasionally give short presentations to provide you with necessary background information. Class discussions should be seen as an opportunity to synthesize and present your reactions to the readings and to work with your fellow students to generate new insights through collaboration. In order for this approach to be successful, it is crucial that all students have read the assignments carefully and made at least a mental note of some questions and comments. I also expect all students to be respectful of fellow seminar participants, even in cases where they may disagree strongly with their opinions or interpretations.

## Reflection Papers

You will be expected to write three short (3-4 page) response papers over the course of the semester. These papers should engage in some detail with one or more of the readings covered in the weeks prior to the due date. These papers can be approached in a variety of different ways. You could, for example, compare two or more readings, or use specific claims and arguments contained in the readings as a springboard from which to evaluate some cultural phenomenon or artifact, or simply offer a synopsis and critique of a particular text.

## Lab Assignments

You will have three "hands-on" homework assignments associated with the labs on text mining, network analysis, and visualization. More information will be provided in the labs.

## Final Paper

Your final paper should be approximately 10 pages and may take one of a few forms. One possibility is a longer critical reflection on one of the topics we have discussed in class, e.g. gender in DH or the question of how we can conceive of literature as data. Another option would be to develop a project proposal for some kind of computationally-assisted analysis. I do not expect you to actually undertake the project in the paper but rather to explain what you would like to do and provide some preliminary exploratory analysis. If you choose this option, you should identify a dataset, a research question, and a possible methodology, and develop a research plan. One way to imagine this assignment is in terms of a fellowship or grant proposal. A third option would be a review essay that offers a synopsis and critique of a selection of books or essays on a particular topic. If you would prefer to do something more creative, computational, or programming-related for your final project, we can discuss this option as well.

## SCHEDULE OF READINGS

### Week 1 (Jan 15- Jan19): Literature as Data

*Readings*:
Marche, "Literature is not Data" (2012)
Syme/Selisker, "In Defense of Data" (2012)
Brooks, "The Heresy of Paraphrase" (1946)
Crane, "What Do You Do with a Million Books" (2006)

### Week 2 (Jan 22- Jan 26): History Manifesto

*Lab*: Introducing the HathiTrust Research Center
*Readings*:
Guildi/Armitage, *The History Manifesto* (2014) [1-13, 88-125]
Cohen/Mandler, "Response to the History Manifesto"

**Week 3 (Jan 29-Feb 2):** **Cultural Studies and Cultural Analytics**

*Lab*: Application Programming Interfaces (APIs)
*Readings*:
Longhurst et al, "Culture and Cultural Studies"(2017) Jean-
Baptiste et al, "Quantitative Analysis of Culture" (2011)
Daniels, "The Largest Vocabulary in Hip Hop"
Jurafsky et al, "Linguistic Markers of Status in Food Culture" (2016)


**Week 4 (Feb 5-Feb 9):** **Digital Humanities, History and Methods**

**First response paper due!**

*Lab*: Optical Character Recognition (OCR)
*Readings*:
Hockey, "The History of Humanities Computing" (2004)
Hughs et al, "Digital Methods in the Humanities" (2016)
Moretti, "'Operationalizing': or, the Function of Measurement in Modern Literary Theory"
(2013)


**Week 5 (Feb 12-Feb 16):** **Text Mining I (Overview)**

*Lab*: HathiTrust Research Center Algorithms
*Readings*:
Sinclair/Rockwell, "Text Analysis and Visualization" (2016)
Jockers/Underwood, "Text-Mining in the Humanities" (2016)
Review one of the exemplary projects described by Jockers/Underwood


**Week 6 (Feb 19-Feb 23):** **Text Mining II (Gender)**

**First lab assignment due!**

*Lab*: 3-minute reports on HTRC Algorithms
*Readings*:
Longhurst et al, "Cultured Bodies" (2017) [277-286; 297-307]
Jockers/Kiriloff, "Understanding Gender and Character Agency in the 19th Century Novel"
(2017)

Erlin et al, "Crossing Over: Gendered Reading Formations at the Muncie Public Library, 1891-1902" (2018)


**Week 7 (Feb 26-Mar 2):     Text Mining III (Circulation and Influence)**

*Lab*: The Viral Texts Project
*Readings*:
Guillen, "A Note on Influences and Conventions" (1971)
Cordell, "Reprinting, "Circulation, and the Network Author in Antebellum Newspapers" (2015)
Smith et al, "Computational Methods for Uncovering Reprinted Texts in Antebellum Newspapers" (2015)

**Week 8 (Mar 5-Mar 9):      Networks**

*No Lab*

**Second response paper due!**

*Readings*:
Weingart, blog post "Networks Demystified" (2011-2013) [Posts 1-9] Emirbayer/Goodwin, "Network Analysis, Culture, and the Problem of Agency" (1994)


**Week 9 (Mar 12-Mar 16):    Spring Break**


**Week 10 (Mar 19-Mar 23): Networks**

*Lab*: Social Networks with Gephi
*Readings*:
Schich, "A Network Framework of Cultural History" (2014)
Horowitz, "Introduction" and "Post-Revolutionary Social Networks" (2013)


**Week 11 (Mar 26-Mar 30): Space and Mapping**

*Lab*: Social Networks with Gephi
**Second lab assignment due!**

*Readings*:
Foucault, "Of Other Spaces" (1967)

Longhurst et. al., "Topographies of Culture" (2017)
Mattern, "Mapping's Intelligent Agents" (2017)


**Week 12 (Apr 2-Apr 5):** **Space and Mapping**

*Lab*: Mapping with QGIS
*Readings*:
Presner/Shephard, "Mapping the Geospatial Turn" (2016)
White, "What is Spatial History" (2011)
Wilkens, The Geographic Imagination of Civil War-Era American Fiction" (2013)


**Week 13 (Apr 9-Apr 13):** **Visual Culture and Visualization**

**Third response paper due!**

*Lab*: Textual Geographies Project
*Readings*:
Manovich, "What is Visualization" (2010) Review
SELFIECITY: http://selfiecity.net/#intro
Tifentale, "The Selfie: Making sense of the 'Masturbation of Self-Image' and the 'Virtual Mini-Me'" (2014)

**Week 14 (Apr 16-Apr 20): Visual Culture and Visualization**

*Lab*: Visualization with Tableau
*Readings*:
Drucker, *Graphesis* (2104) [excerpt]
Galloway, "The Unworkable Interface" (2008)


**Week 15 (Apr 23-Apr 27): Futures**

*Lab*: Visualization with Tableau

**Third lab assignment due!**

*Readings*:
Nowviskie, "Digital Humanities in the Anthropocene" (2014)
Posner, "What's Next? The Radical, Unrealized Potential of Digital Humanities" (2016)
Blevins, "Digital History's Perpetual Future Tense" (2016)

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# Essential Readings in DH - Lab Report #1
# Text Mining

**The Gist:**
Choose one of the HTRC Analytics algorithms (https://analytics.hathitrust.org/algorithms), run it on your HTRC workset, and compose a two-page (double-spaced) report

**The Details**:
Briefly introduce your workset and explain why you have chosen this set of texts. Narrate which HTRC Analytics Algorithm you decided to run on your workset, the parameters you selected, and why. Then make a brief interpretative argument about your workset based on the results yielded by this algorithm. Focus on one or two insights.

To conclude, imagine the next steps you might take to further pursue this interpretive argument if you had unlimited technical capabilities to pursue it.

**In-Class Report**:
On Monday, February, 19, you will briefly share this report (~3 minutes) with the rest of the class. Please prepare at least one presentation slide with a visual (a screenshot of your HTRC topic model, etc.), and add it to our shared class presentation:
https://docs.google.com/presentation/d/1JY6igIkyGxGBtD2sBW9WxJNjfSxkdn-6Vy8T2UKDgsg/edit#slide=id.gc6f889893_0_5

**Possible HTRC Analytics Algorithms**:

Meandre Topic Modeling

Meandre OpenNLP Entities List

Meandre Dunning Log-likelihood to Tagcloud

**Please email Lab Report #1 to melanie.walsh@wustl.edu
by Monday, February 19 at 12:10pm**

# Essential Readings in DH - Lab Report #2
# Network Analysis

**The Gist:**
Create a network in Gephi by choosing one of the sample social network datasets
(https://github.com/melaniewalsh/network_analysis_lab) or compiling one of your own (after consultation
with Melanie). Compose a three- to four-page (double-spaced) report explaining and analyzing this network.

**The Details**:

1. Dataset

Briefly introduce your dataset and explain the significance of this data as a network. What do the nodes
represent? What do the edges represent? Is the network unimodal or bimodal? Are the edges directed or
undirected?

2. Methodology

Briefly narrate the steps you took to create your network in Gephi. Which layout algorithm did you choose?
How did you size and color the nodes and/or edges? **Include an image (.png) of the final network.**

3. Analysis and Interpretation

Make a brief interpretative argument about the network by including and explaining at least two network
metrics (e.g., degree centrality, modularity class, betweenness centrality).

4. Conclusion

Discuss the next steps that you would take to address any challenges/obstacles that you faced or to further
enhance your interpretive argument.

**Please email Lab Report #2 and \*your Gephi network file\***
**to melanie.walsh@wustl.edu by Friday, March 30 at 5pm**

# Essential Readings in DH - Lab Report #3
# Data Visualization

**The Gist:**
Create a data visualization in Tableau by choosing one of the sample datasets
(https://github.com/melaniewalsh/data-viz-lab) or compiling one of your own (after consultation with
Melanie). Compose a two- to three-page (double-spaced) report explaining and reflecting upon this
visualization.

**The Details**:

1. Dataset and Focus

Briefly introduce your dataset and explain which aspect of the dataset you chose to visualize and why.

3. Methodology, Analysis, and Interpretation

Narrate the steps that you took to create your visualization in Tableau. Which layout (bar chart, line graph, pie
chart, etc.) did you choose and why? What were you trying to explore or emphasize about the data? What
customization choices (size, shape color, font, etc.) did you make and why?

Make a brief interpretative argument about the underlying dataset that is supported or revealed by the
visualization(s). **Include at least one image (.jpg) with an accompanying caption and legend.**

4. Conclusion

Based on your experience creating this visualization, what would you say are some of the keys to effective,
ethical, and appealing data visualization?

**Please email Lab Report #3 and \*your Tableau workbook\***
**to melanie.walsh@wustl.edu by Friday, April 27 at 5pm**