

ENGN 5559 Digital Literary Studies

MW 2:00PM - 3:15PM New Cabell Hall 038

Instructors -

Alison Booth, booth@virginia.edu, 436 Bryan Mondays 3:30-4:45, Wednesdays 1-1:50
or by appointment either in Bryan or in the ThinkTank, Scholars' Lab, Alderman Library
Brandon Walsh, bmw9t@virginia.edu, Alderman 417, Alderman Library, Tuesdays 9-11

Note: Some aspects of schedule or readings are subject to change. Readings that are not yet provided on our course site (Collab) or as hyperlinks from this syllabus are starred: **

Course Description

How do you measure a book? Can machines read? Do we read prose texts now the way people read them in 1919 or in 1819? We are swimming in textual data that could change our understanding of the written word - if you have the right tools and know how to access and work with it. What could you learn to do with all these different forms of textuality, with all this data? Can you find connections between your current interests in literature and the perspectives that technology opens up, or the goals of your career?

This course is meant to give you practice with a variety of methods and real-world scenarios to help you participate in digital projects, using both prepared materials and your own. The course fulfills an elective in the Graduate Certificate in Digital Humanities (DH). We want to introduce you to literary computational methods as part of digital humanities, no matter what previous familiarity you might have. You will find any of your previous studies of literature highly relevant and useful for participating in this course. No one needs to be or to become a programmer. You will begin with your own interests and skills and help us encounter, together, specific methods of digital reading or ways to analyze and visualize the data of texts, including topic modeling and XML markup.

There is room in our plans for us to consider how our methods could be applied for selected writers or literary works or genres that you want to write about or work on, or that you have encountered in other courses or personal reading. A focus on literary DH in this course doesn't cover the entire spectrum of possibilities for digital research. We hope you will be interested to inquire further, and follow your paths with different tools and methods beyond this course.

A Note on Methods of Instruction

Digital humanities work is most often collaborative, and we are very excited to teach the course with you together. We each have particular strengths, and we will trade off leading class accordingly. Neither of us knows everything, and we will take a flexible approach to ensure your success. We expect to learn from you during the course as well! Accordingly, we encourage you to work together, particularly on the programming or methodological assignments.

In class, we will discuss case studies of digital projects, selected readings on theory and practice, and examples of methods. Other class sessions will be hands-on workshops. Everyone learns at their own pace. We expect you to do independent work, beyond class sessions, on portions of two introductions to programming and the short assignments that introduce text analysis and an XML schema for narrative annotation. Independent does not mean alone, however. We will make ourselves regularly available for consultation, and offer additional sessions beyond class workshops as needed.

Themes, Skills, Expectations (see also assignments and assessment following the schedule below)

You will be invited to think about questions such as:

- What are the affordances and limitations of close reading, mid-range, and distant reading, as these have been defined in various ways?
- Are there measurable differences, at the level of language or textual features, between fiction and nonfiction, at a close or distant scale?
- What are some of the skills and best practices for planning and implementing a digital text analysis project, in collaboration or on your own?

By the end of the semester, you will have:

- completed a short assignment to **assess a digital literary project**
 - What makes a good project, according to different designs and aims?
 - How has literary DH moved from producing an online “archive” of a famous writer to extracting features from the corpus of millions of books digitized by Google? When is an online curated collection still a/the most needful thing? (Hint: studying marginal people or entities.)
- carried out other assignments to **introduce or let you gain experience in basic methods**, including:
 - Fundamentals of text analysis in Python

- Topic modeling
- Making a TEI/XML document from a short plain text available from HathiTrust and adding this formatted document to an online repository
- Data cleaning, whether the data are “tokens” (e.g. words) or people (e.g. persons in a biographical database)
- Familiarity with a relational database and the workflow of a team using subversion software (to avoid conflicts when many people are updating a repository)
 - We will also look at other ways that DH projects communicate and share their datasets and documentation, e.g. Github; Slack
- Familiarity with oXygen software for editing XML documents, and how to work with choices of controlled vocabularies
 - Biographical Elements and Structure Schema (BESS) is the specific schema you will learn about; it is designed for comparing short biographies of women
- **proposed your own digital project** and determined first steps towards executing it on your own.
 - What is a feasible scope in a semester or longer?
 - What tools and work plan would you need?
 - A semester often proves too little time to implement such projects.
 - Manageable projects include working with BESS on the TEI chapter you created, or designing visualizations of the existing data in [Collective Biographies of Women](#).
- **considered approaches to genre**, pervasive in literary DH.
 - How do the above skills pertain to corpora built from fiction vs. nonfiction?
- **encountered the DH community at UVA**, including the Scholars’ Lab and other parts of the Library
 - Where would you go to find collaborators and resources for the project you proposed and scoped out?
 - What kinds of digital research interest you most?

Materials

- [Learn Python the Hard Way](#) - \$30; we will work through this along during the course - exercises you should have finished for each week will be listed. Make sure you buy the book for Python 3. Python 2 has significant differences.
- [NLTK Book](#) - free; throughout the course, you are expected to be working through this textbook on your own. You are welcome to go further and do more, but target chapters and exercises for each week will be listed alongside the

readings for that class meeting. When applicable, the syllabus will state that you should upload exercises to File Drop.

- Miscellaneous readings available for free online or on Collab. For the latter, open the Resources folder, and then the Digital Humanities Sources folder, for essays. In some instances, you will find items in the Research Tools or other folders under Resources.
- Our primary textual corpus will be drawn from [Collective Biographies of Women](#), a database and bibliography and related texts from HathiTrust, though you will be welcome to work with the instructors to devise your own small corpora to compare the discoveries in studies of narrative through different methods.

Course Schedule

Please come to class having **read the pieces or completed the lessons/materials listed for that day**. In general, Mondays will be reading discussion, Wednesday will be further discussion and practical workshops or activities (diagnostic/formative and not graded). Each week's readings are listed for Monday; sometimes that is quite a lot of reading, so read them in order and get as far as possible by Monday's class. **You should complete all the reading and assignments for that week by Wednesday's class**. As noted under Materials, some readings are pdfs loaded to the Collab Resources: Digital Humanities Sources folder; others are linked in this syllabus. Any programming exercises should be completed and returned by file drop (when appropriate) by Friday of that week on the course schedule to allow time for you to work after the Wednesday workshops.

Starting discussion: There will be a sign-up sheet for you to take a turn to shape discussion of a day's readings--a chance to practice your teaching as well as reading skills, as you identify key arguments of an article and formulate any questions you have about the readings.

Throughout the course we will determine **what interests you**. We may shift some of the plans for later class sessions to accommodate what you want to talk about. We also anticipate that you will have encountered new questions as you gain practice in the different kinds of coding.

Week 1 - Introduction

M Jan 14

We can read a million books...should we?

- Textual studies past and present

- Smith, Barbara Herrnstein. “What Was Close Reading? A Century of Method in Literary Studies,” *Minnesota Review* 87 (2016): 57–75.
 - Pdf in folder: “HerrnsteinSmithCloseReading”
- Bode, Katherine. “The Equivalence of ‘Close’ And ‘Distant’ Reading; Or, toward a New Object for Data-Rich Literary History.” *Modern Language Quarterly* 78, no. 1 (March 1, 2017): 77–106, <https://doi.org/10.1215/00267929-3699787>. Pdf in folder
- Hancher, Michael. “Re: Search and Close Reading,” in *Debates in the Digital Humanities 2016*. University of Minnesota Press, 2016. 118–38. <http://conservancy.umn.edu/handle/11299/181603>.

Short assignment: Students choose one digital project (see [Projects List](#)) and complete the [DH Project Assessment Assignment](#) found in Short Assignments folder in the Resources folder. This assignment is **due in your File Drop by January 25**. Depending on class time, we will ask you to share the project and your impressions, informally, with the group on a future date.

W Jan 16

- [What is the Command Line?](#) and [Command Line vs GUI](#)
- [Learn Command Line the Hard Way](#) - intro and exercises 1-7, 9. **No exercises due on Filedrop - be in touch if you have issues.**
- In class: Introduction to Command Line Workshop

Week 2 - Reading up Close and Far Away

M Jan 21

What kinds of questions can you ask when looking at a million texts? What can't you?

- Kirschenbaum, “What is Digital Humanities and What’s It Doing in English Departments?” ADE Bulletin 2010; in *Debates in Digital Humanities*, ed. Gold (2012) <http://dhdebates.gc.cuny.edu/debates/part/2>
- Kopec, “The Digital Humanities, Inc.” PMLA 2016 pdf in folder
- Liu, “The Meaning of the Digital Humanities” PMLA 2013 pdf “Meaning in DH” in folder
- Cordell, “[Why You, a Humanist, Should Care about Optical Character Recognition](#)”

W Jan 23

- Brief explanation of data cleaning in class
- Learn Python the Hard Way (*LPTHW*): Preface and Exercises 1-10. **No exercises due on Filedrop - be in touch if you have issues.**
- In Class Workshop: Introduction to Python and Programming Concepts I

Short Assignments: 1) Your DH Project Assessment Assignment is due on Collab File Drop by Friday January 25. Be prepared to talk briefly about the project (show the site, summarize your answers to the assignment questions) at some future class time.

2) Each student is assigned a small set (10-15) of “person records” in <http://cbw.iath.virginia.edu> for data cleaning. The [Data Cleaning guide](#) is a reading assignment for Monday January 28. Work on these records before class on January 30; we will work through any questions or additions to the records together in class as well.

Due Friday February 1: First blog

https://pages.shanti.virginia.edu/19Sp_ENGN_5559-001_CGAS_2/ this should lead you to the right site. Add wp-admin after the last forward slash of the URL, and that will get you to the dashboard after you login. Click +New (in the upper tool bar) and choose Post from the drop down menu. Good luck!

Week 3 - Biographical Data and Narrative Genres

Note: each student will be sure to get oXygen software and repository of CBW project set up on personal computer before week 4.

M Jan 28

Are lives narrative constructs? What is the history of narrating lives? Could we compare medieval saints’ legends, print-era self-help biographies, and life writing in new media? What are the costs in every respect?--Labor, paywalls, erasures or simplifications for ready access, etc.

- Special Issue: [Computational Models of Narrative](#) in LLC, now DSH (Oxford UP journal). Read Editorial (introduction) and all abstracts, and get a sense of the substance of (by last name of first author) Bex, Fisseni, Reiter. Other topics may interest you. Bear in mind the interest in cognitive science and AI. Look up the Wikipedia article(s) related to Vladimir Propp. (Your instructors have subscribed to the journal as members of ADHO, and it appears that articles are available for users of UVA’s library.)

- Read [Data Cleaning guide](#) (pdf in Resources folder: Research Tools, on Collab) and explore the CBW project: <http://cbw.iath.virginia.edu> and the /cbw_db extension of this site, i.e. the back-end or “admin” site.
- Explore sources of confirming data about persons. Almost any literary or humanities project entails some biographical data, often a social network or database/prosopography. Recommended:
 - Wikipedia (what is the criterion of “notability”?)
 - [Overlooked](#)
 - Biography.com, and consider other kinds of online and analog reference works
 - [Social Networks in Archival Context](#)
 - [Oxford Dictionary of National Biography](#) (go to UVA library-->research-->search under “O”) for you own Netbadge link access: any British biographies. (What is the history of increasing inclusiveness?)
 - [Find a Grave](#)
 - [Orlando](#) (prosopography of “all” British women writers) (also licensed by our library; Cambridge UP)
 - [Women Writers Project](#) (licensed)--curated archive of early women’s writing; tools for intertextual network visualization
 - Note that both Wikipedia and SNAC have ingested some or all of CBW’s person records.
- Booth, Alison. “Prosopography and Crowded Attention in Old and New Media.” In *On Life-Writing*, ed. Zachary Leader. Oxford: Oxford University Press, 2015. 72-98. Pdf in Resources: Digital Humanities folder, on Collab
- Booth, Alison. *How to Make It as a Woman: Collective Biographical History from Victoria to the Present*. Chicago: University of Chicago Press, 2004. Introduction, 1-47. Pdf in Resources: Digital Humanities folder, on Collab

W Jan 30

- Cleaning Data
 - Come to class having participated in data cleaning of CBW records.
- *LPTHW* - exercises 11-22. **No exercises from LPTHW due on Filedrop - be in touch if you have issues.**

Blog post due on Friday, Feb. 1

Week 4 - Narrative and Genre continued

Mon Feb 4

How do we tell stories to a machine? What is prosopography (collective biography) and why does Internet culture circulate our pictures and “profiles”? Is your online persona a fiction?

- Underwood, Ted. [“Distant Reading and the Blurry Edges of Genre.”](#) *The Stone and the Shell*. 22 Oct. 2014.
- Ted Underwood on [The Life Cycle of Genres](#)
- David Bamman and Noah Smith, “Unsupervised Discovery of Biographical Structure from Text,” *Transactions of the Association for Computational Linguistics*, 2014. Pdf of preprint in DH folder
- Conway, Mike. “Mining a corpus of Biographical Texts Using Keywords,” *Literary and Linguistic Computing*, Volume 25, Issue 1, 1 April 2010, Pages 23–35. Pdf in Resources: DH folder, and online through UVA’s subscription. <https://doi.org/10.1093/lc/fqp035>
- [BESS Guide](#) (pdf in Research Tools under Resources)

W Feb 6

- *LPTHW* - exercises 21-33. **No exercises due on Filedrop - be in touch if you have issues.**
- In class: BESS Introduction - Bess workshop

Week 5 - Getting Started with a Corpus (and as a DHer)

M Feb 11

How do I get from here to there?

- Daniel Shore, *Cyberformalism* (excerpt: Preface and parts of Methods); Pdf in Resources: DH folder, under *Cyberformalism*.
- Speaking in Code, [Origin Stories](#)
- Ted Underwood, [Where to Start with Text Mining](#)

W Feb 13

- *LPTHW* - finish through exercise 39 (inclusive). **No exercises due on Filedrop - be in touch if you have issues.**
- In-class workshop on Bess II

Week 6 - Searching and Frequency Analysis

M Feb 18

How can something meant for counting read at all? How do you measure a book?

- Piper, Andrew. "Fictionality." *Journal of Cultural Analytics*, December 20, 2016. <https://doi.org/10.22148/16.011>
- Ramsay, Stephen. *Reading Machines*. 2011. (selections) - Read Preconditions and chapters 1 and 4.
- Readings from [Representations vol. 127 number 1](#): Search Forum (Summer 2014)
 - Pdfs are in Resources: DH folder by author last name. You can read it online.
Puckett, Introduction
Frederic Kaplan, "Linguistic Capitalism and Algorithmic Mediation"
Ted Underwood, "Research Practices We Forgot to Theorize"
Lisa Gitelman, "Searching and Thinking about Searching JSTOR"
Daniel Rosenberg, "Stop, Words"
Leah Price, "Response"

W Feb 20

- [Natural Language Toolkit Book](#) - [Preface](#) and [Chapter 1](#). For chapter 1, read through section 4 and complete exercises 1, 3-5. Note: you should be typing the code snippets from the text into the Python interpreter as you go and reflecting on the results. This is true throughout the NLTK book. **Submit exercises through filedrop by Friday at noon.**
- Workshop - Python for Text Analysis

Week 7 - Topic Modeling

M Feb 25

How do you interpret a black box?

- [The LDA Buffet](#), Matt Jockers
- [What can topic models of PMLA teach us about the history of literary scholarship?](#), Andrew Goldstone and Ted Underwood

- Rhody, Lisa. "[Topic Modeling and Figurative Language](#)," *Journal of Digital Humanities* vol. 2, no. 1, Winter 2012,
- Walsh and Horowitz: "[Bags of Words](#)," "[Topic Modeling Case Study](#)"
- *Debates in Digital Humanities* ed. Gold and Klein (2016) [Part VI: Forum: Text Analysis at Scale](#) 525-68.

W Feb 27

- NLTK Book - finish ch. 1. Read through section 5 to the end and complete exercises 6-8, 11, 13, 15, 24. **Submit exercises through filedrop by Friday at noon.**
- **In class:** Topic Modeling Workshop. Read and work through "[Quickstart Guide](#)" for the Topic Modeling Tool, Scott Enderle, using a sample corpus.

Week 8 - Machine Learning

M Mar 4

Proposal for Essay due

How and why do machines feel?

- ML
 - Walsh and Horowitz, "[Supervised classifiers](#)" and "[Classifying Texts](#)"
 - Walsh, "[Hearing Silent Woolf](#)" and "[Reading Speech](#)"
- Sentiment Analysis -Matt Jockers and Joanna Swafford on syuzhet
 - <http://www.matthewjockers.net/2015/02/02/syuzhet/>
 - <http://www.matthewjockers.net/2015/02/25/the-rest-of-the-story/>
 - <https://annieswafford.wordpress.com/2015/03/02/syuzhet/>
 - <http://www.matthewjockers.net/2015/03/04/some-thoughts-on-annies-thoughts-about-syuzhet/>
 - <https://annieswafford.wordpress.com/2015/03/07/continuingsyuzhet/>
 - <http://www.matthewjockers.net/2015/03/09/is-that-your-syuzhet-ringing/>
 - http://www.matthewjockers.net/2015/03/24/ringing_endorsement/
 - <https://annieswafford.wordpress.com/2015/03/30/why-syuzhet-doesnt-work-and-how-we-know/>
 - <http://www.matthewjockers.net/2015/04/06/epilogue/>
 - <http://dhdebates.gc.cuny.edu/debates/text/100>

W Mar 6

- NLTK Book - [Ch. 2](#); Read sections 1, 3-4, 6. Complete exercises 1-4. **Submit exercises through filedrop by Friday at noon.**
- In class: Python for Text Analysis II and Machine Learning Workshop with Text Blob.

No meetings for Spring Break week of March 11-16

Week 9 - Critical Code and Social Justice

Can these methods take into account complex questions of race and gender?

M Mar 18

- Black Arts Poetry
 - [Measured Unrest in the Poetry of the Black Arts Movement](#), Ethan Reed
 - [Poems with Pattern and VADER, Part 1: Quincy Troupe](#), Ethan Reed
- African American women in CBW: a clean cohort “matched” with SNAC
- Lauren Klein and Catherine D’Ignazio, [Data Feminism](#) (MIT Press, 2019, forthcoming)--open review
<https://bookbook.pubpub.org/pub/dgv16l22#discussions> (introduction, browse other chapters)
- Tara McPherson, [“Why Are Digital Humanities So White?...”](#) *Debates in Digital Humanities* (U. Minnesota Press, 2012), 139-60.
- Kim Gallon, [“Making a Case for the Black Digital Humanities.”](#) *Debates in Digital Humanities* (U. Minnesota Press, 2016), 42-59.

W Mar 20

- NLTK Book - Ch. 2 - complete exercises 6-7; 9; 15; 17. **Submit exercises through filedrop by Friday at noon.**
- In class: Python for Text Analysis pt. 3

Week 10 - Data Curation

M Mar 25

When is cleaning a kind of violence?

- [Against Cleaning](#), Katie Rawson and Trevor Muñoz

- [Transcription is Complicated](#), Ethan Reed
- [Data Praxis: A Could Be Common Cause](#), Thomas Padilla

W Mar 27

- NLTK Book - [Ch 3](#); Read 3.1 and 3.2 - complete exercise 18. **Submit exercises through filedrop by Friday at noon.**
- In class workshop - Python for data cleaning

Week 11 - Digital Literary Studies That Don't Focus on Textual Editing or Analysis

What do we do when we do literary DH? The choices of material are never neutral: a famous author; a literary movement; selecting for diversity or voices we want to hear now; who participates and receives credit? This week, we take the optimistic or futuristic outlook, and consider diverse forms of literature-related data and inquiry.

Blog 2 due by April 5

M Apr 1

As a group, we will populate a list of examples of data, designs, research questions that relate somehow to "literature" but do not resemble most mainstream academic literary scholarship in the form of the research outcome. Note that some online literary studies do resemble some longstanding methods in conception and aims. Some possible directions:

- Maps: e.g. Homeric Ships;
- Social Networks
- Itineraries
- Data on reading, such as crowd annotation, anonymous reviews

W Apr 3

- NLTK Book - Ch. 3 continued - read but don't do code for 3.6, 3.8, and 3.10. Complete exercise 20. **Submit exercises through filedrop by Friday at noon.**
- In class workshop: TBD by you!

Week 12 - Critiques

This week, we get embattled again. In this course, we have not plunged into the Post-Critique criticism of High Theory/Critique. But we are surrounded by controversies about what humanists should be doing. Like, are you allowed to do this? How do you

respond when someone says you're destroying the discipline? What are sources of resistance to DH, or within DH, specifically regarding literary studies? What happens to the author or the text with new quantitative methods? Let's consider the value of actual information on different scales and a descriptive tolerance as a starting point ("surface reading" or "generous thinking").

M Apr 8

- See Interviews link: The Digital in the Humanities, *Los Angeles Review of Books* <https://lareviewofbooks.org/feature/the-digital-in-the-humanities/> Read/browse four of the interviews.
- Allington_Brouillette_Golumbia, "Neoliberal Tools" <https://lareviewofbooks.org/article/neoliberal-tools-archives-political-history-digital-humanities/>
- Return to Forum on Franco Moretti, *Distant Reading PMLA* 132: 3 (May 2017). UVA subscribes; login: <https://www-mlajournals-org.proxy01.its.virginia.edu/loi/pmla>
- David L. Hoover, "[Argument, Evidence, and the Limits of Digital Literary Studies.](#)" *Debates in the Digital Humanities* (U. Minnesota, 2016), 230-50.
- Kathleen Fitzpatrick, *Generous Thinking* (Johns Hopkins U. Press, 2019), chapter three, "Working in Public." pdf in Resources DH folder on Collab

W Apr 10

Workshop on our evolving skills, on the NLTK exercises.

Explore back-end of examples of literary archives circa 2000 or even now that really are continuous with the aims of literary studies, and others that seem more deformative.

Comments on blogs due by April 12

Week 13 - Boundaries of Literary DH

M Apr 15

This week's discussion will emerge from the intensive reading and practice of previous weeks. We may address the subjects of blogs, and examine sample texts and projects. Among questions are:

- Where have print genres gone?
 - Add to this list: Digital poetry; puzzle poetry; hypertext; Twitter literature; life writing online; travel blogs...

- How is literature produced and taught? DH does not equal teaching with technology or writing online, does it?

W Apr 17

This week's practical class will revisit some skills we have used or encountered, particularly XML/TEI. We will also discuss the scope of projects and out-of-the-box or open access tools that can lead to good micro-computing or pedagogical or short-term projects. By now, we may have more answers to the difference it makes to approach the biographical narratives in CBW from a mid-range or distant reading.

- What can we do with CBW's corpus, data about persons and texts, and the BESS analysis?
- Gephi, Voyant, other visualization tools.

Week 14 - Your research, shared

M Apr 22

Plan Roundtable

W Apr 24

Roundtable

Essay due April 26

Week 15

M Apr 29

Where have we been, and where would you go next?

Requirements and assessment

While the course asks a lot, it is designed for all to play their parts in everyone's shared progress. Short assignments will ask you to move through the various steps of doing this kind of work in a professional context. To assess your work, we value your willingness to try, your collaboration, and your reflections on the learning process as much as your actual facility with the technical methods. We aim to offer clear support

and guidance, making everyone comfortable with the process of learning this kind of work, and sharing a sense of the payoff that would come with mastery. You will know how to get started, where to go for help, and how applying computational methods to literary study might contribute to your research and teaching in the future.

In addition to short assignments and activities, the following are required:

- Two blog posts: due February 1 and April 4
 - Working in public is a major component of digital humanities research - practitioners in the field are often as interested in the process by which a project was conducted, its failures and missteps, as by the final product. We want you to practice working in this same mode. You will write two blog posts reflecting on the course materials and methods (such as discoveries about the CBW corpus) and your interests, efforts, and insights. At least one image, one or more links, all sources credited; no more than 1000 words. All students will post to the course Collab site. Those who wish to share the blog will revise it based on comments and input, and at our discretion, may have it approved for posting to the Scholars' Lab blog and/or the CBW blog. We will help you with this process.
 - Students should read each other's blog posts and comment constructively. Comments may be very brief, direct dialogue with a particular point rather than "reviews" of the whole.
- Essay (8-10pp), due April 26
 - Successful digital humanities includes effective communication *of* and *about* the research. Some have developed careers writing about technology in relation to books and other mediation of texts, that is, their research practice closely resembles that of any literature professor, not working in collaborative teams with programmers or designers. This assignment is intended for you to practice writing about textual studies in light of the themes of this course. You will submit a proposal in advance. Essays may research a particular kind of literary computational study such as projects we have assessed; may investigate the material and methods you would like to pursue in a longer digital project of your own--perhaps writing almost like a grant proposal or fellowship application; may engage with findings on biographies of women in CBW using BESS and/or other methods. Any researched critical essay related to literary studies is welcome, but should feature some aspect of the extraordinary proliferation of digitized texts accessible to the public online.

- **Attendance and Participation:** This is a seminar. Attendance and class participation are important. We accept **two unexplained absences in a semester**. Any additional absences (or significantly “absent” presence in the room) count against your participation grade.
- **Presentation:** to be scheduled near the end of the semester; we will coach you on what a roundtable presentation of research and ideas would be in a professional context, and we will hold one in class. Individuals prepare their part, but the whole session is a collaboration.

Grading:

- Essay (8-10pp) - 35%
- Two blog posts - 15%
- Short assignments, lessons - 20% (in practice, if you do these and discuss/share them in class, the work is Satisfactory)
- Participation - 30%
 - Class attendance and participation
 - Start/lead at least one discussion of readings
 - Help plan, prepare your own part, and participate in an in-class roundtable presentation
 - Programming assignments
 - Comments on classmates' blog posts