Introduction to Digital Humanities

NYU ABU DHABI IM-UH 1111X-001 FALL 2017

Course code: IM-UH 1111X-001 (24542) [formerly AHC AD 139]

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Office: A6 1151

Office hours MW 230-330, or by appt

Course meeting time and place: 1150-105pm, C3 118

This course provides an introduction to, and critical engagement with, issues in the interdisciplinary research field known as "Digital Humanities." As we move between the overlapping worlds of the "digital" and the "humanities," we will explore both the benefits, and limitations, of digital methods in research applied to texts and objects of the cultural record.

Key issues in the course include

- how texts are digitized, encoded and collected in digital environments, as well as challenges
 of working in languages other than English;
- how textual and spatial data relevant to the humanities might be collected, structured and visualized:
- how computer languages and digital platforms might be used to analyze and represent our research materials;
- · how digital methods provide new perspectives, and new scales, for humanistic inquiry.

<u>Themes/methods introduced in the course</u>: the historical organization of humanities knowledge, text corpora, OCR, crowdsourcing, textual markup/markdown, distant reading, humanities data visualization, web mapping.

There is no final paper in this course, nor is there an exam. Instead, students will build a digital course portfolio, consisting of a research blog, a mini digital project and a plan for a research project relevant to their interests. In addition, all those in the course will contribute to a collective project of historical significance to the region of Arabia/Western Asia.

There are no prior technical skills required for this course. Most of the software and platforms used are free and user friendly. Curiosity and a willingness to engage with technology will be essential.

Outcomes

By the end of this course, students will have

- 1. Explored how knowledge in the humanities has been historically organized and how digital environments both preserve and expand those practices.
- 2. Discovered some of what humanists in the 21st century consider "data".

- 3. Had hands-on experience with how structured humanities data works within digital environments (encoding text, analyzing textual data, explored storytelling through maps about culture).
- 4. Come to appreciate both the critical, intellectual labor as well as biases that become 'hidden' in data.
- 5. Assessed the concept that making is a form of knowing.
- 6. Acquired new "distant" frameworks of analysis for humanities materials such as mapping and visualization, examining their affordances and limitations.
- 7. Gained an appreciation for openness and transparency in research, balancing process and product.
- 8. Learned some basic aspects of digital production (data formats, simple customization, computer languages, etc.) related to humanities materials.
- 9. Explored overlaps between DH and their respective intellectual interests and cultural and linguistic diversity.
- 10. Participated collaboratively in a digital humanities research project about Arabia/Western Asia.

Participants in the course in Fall 2017 included

siamba.hosting.nyu.edu

whyb.hosting.nyu.edu

hindsight.hosting.nyu.edu

bazoukos.hosting.nyu.edu

brandon.hosting.nyu.edu

digitkind.hosting.nyu.edu

Individual Project Guidelines

Your project is a proof of concept, small-scale investigation. Remember that you will not be successful in all you set out to do. *It is as important to document your challenges as your definitive results.*

Your writeup of your project should

- -be completed within your personal blog.
- -have a title.
- -be longer than a regular blog, but not longer than 1500 words (it might be shorter).
- -contain visuals that illustrate key findings, problems, etc. (maps, screenshots, photos).
- -present all relevant datasets for download (if the file extensions are not permitted within WordPress

then you can host the data in Drive or dropbox).

-contextualize your project briefly within the themes/readings of the class (it can refer back to other blog postings.)

You might think about the following questions as you write up your individual project:

- -do the tools that you have learned to use help you to understand human cultural phenomena better? do they limit what you can know?
- -what would be the ideal infrastructure for your data? how would it be prepared and cleaned for optimal analysis?
- -if you had lots of collaborators, how might your project reach further and cover more ground?
- -if it were to grow into a larger project, what additional questions would you want to ask about your subject?

Collective Project

The Fall 2017 Introduction to Digital Humanities class embarked upon a collective research project using digital text analysis and mapping to explore a subset of a historical text collection (ECCO TCP) that mentions the Arabian Gulf/Western Asian region.

This means **putting into action** some of the skills we learn over the course of the term: corpus building, data cleaning, digital textual analysis, mapping, as well as thinking about the historical context of such writing.

Each student has been assigned a segment of the project writeup to work on in pairs. The writeup should

- -be completed within the collective blog.
- -be longer than a regular blog, but not longer than 500 words (it might be shorter).
- -provide a "birds eye" view of what you discovered about the corpus we chose.
- -contain visuals that illustrate key findings, problems, etc. (maps, screenshots, photos, charts) as well as any relevant links to outside resources.
- -present all relevant datasets for download (if the file extensions are not permitted within WordPress then you can host the data in Drive or dropbox).

Make sure you include your name or avatar with a link back to your web hosting.

Readings

There are two books for this course and numerous embedded links to electronic resources.

- Berry/Fagerjord, Digital Humanities: Knowledge Critique in a Digital Age (Polity, 2017)
- Burdick et al. *Digital_Humanities* (MIT, 2014)

These are available at the university bookstore for purchase. The first is on reserve at the NYAUD library. The second exists also in an open access download here.

A **reference guide** for DH is in preparation at the NYUAD library.

Week 1

1 (4 Sept) Introduction to the course

2 (6 Sept) Discussion of "Short Introduction to the Digital_Humanities" (pp. 121-135); reflections on #dayofDH #dhad2017, overview of semester goals

During and after class: Digital Narratives: Write about one page of digital/computational personal narrative. Things to address could include: How do you use digital resources? Which are the most time-consuming for you? Easiest for you? What kinds of computers/devices have you used/owned? Can you find pictures of these "heritage" devices? How do you feel about the word "data?" Where do you encounter data in your life? Where do you create it? What do you know already about the intersection of computing and humanities? Have you ever learned a programming language (which ones?) Do you know any CSS, HTML, Python, R?

Week 2

3 (11 Sept) to be made up

4 (13 Sept) What do Digital Humanities look like? Where are they Done?

Readings before class: D_H 31-60 / Demystifying DH - Values of DH

***Opportunity: Newberry Open Data Grant: French Pamphlets (your individual project could be a draft for this)

Week 3

5 (Mo 18 Sept)

Preparation before class: Exploring Project-based Research. Choose <u>one</u> digital projects, one from the list below or from one of the many Digital Humanities Centers around the world found in the centerNet listing **here**. NYU's Center for the Humanities features projects **here**. Try to identify the "project notes" for each. How many people were involved? What kinds of data they use? What kind of argument does the digital project make? Is it funded? How long has it existed? What parts of the world are most represented in what you found? What parts are underrepresented? How do the projects describe what it is that they are doing (notice especially the verbs, especially gerunds, -ing verbs).

Arabic Collections Online / Digital Harlem / The Grub Street Project / The Walt Whitman Archive / Songs of the Victorians / Interactive Ibn Jubayr / Rai'tu Ramallah / The Blue Mountain Project / Mapping the Republic of Letters /The World's Fair in Italy / Ieldran / Digital Karnak / Austen Said / Contested Memories / A Colony in Crisis

In-class presentations: Come to class ready to report back on briefly, and discuss, what you found. This is your first participation grade. After today's whirlwind tour through some digital projects, you might want to skim through Posner's **How Did They Make That?**, Koh's **Introducing Digital Humanities Work to Undergraduates**.

We will put these projects in the context of last class's readings.

6 (We 20 Sept) Computational Thinking and its Skills Berry ch 3 "On the Way to Computational Thinking;" examples (Voyant; Tableau, Exploring the Programming Historian).

Choosing a name for your web hosting Making an avatar What your avatar might say about you?

Week 4

7 (Mo 25 Sept) Introduction to Web Hosting

NYU Libraries offers web hosting. The objectives of that service are threefold:

- to foster web literacy ("Master the tools and technology that make up the web to build your own space online"),
- to explore digital identity ("Explore the notion of digital identity and how publishing on the web can frame an identity") and
- to reclaim one's content ("Learn to take ownership and control over the content you put on the web instead of handing it to third-party publishers.")

Read:

World Economic Forum, Digital Citizenship, Creativity and Entrepreneurship
A Brief History of Domain of One's Own Part 1, Part 2
"Leveling up with Domain of One's Own"
WordPress.com vs WordPress.org

Download Filezilla (an ftp client for web development) to your laptop.

Online safety: What are doxing? trolling? swatting? Locking down your digital identity

In class we will look create a wordpress.com site and publish some basic content. Then we will delve into our web hosting, learn some basics in cpanel and download an instance of WordPress.org to get you started.

A good place for you to learn about such topics on your own is **lynda.com**—although the lessons are not always a perfect match with what you need. You can also turn to **stackoverflow.com** with more technical questions.

8 (We 27 Sept) What is a corpus? How does one build a corpus?

Before jumping into the idea of a corpus, we will look at some basic ideas in WP (theme, plugin, pages, posts, html vs editor)

Reading mentioned in class: Gardiner/Musto (DHP), 31-42 "The Elements of Digital Humanities: Text and Document;" Cooney/Roe/Olsen "The Notion of a Textbase"

Exercise in class: pick two of the following text archives (in the languages you are comfortable in, or feel free to find your own): Internet Archive / Project Gutenberg / Oxford Text Archive / Corpus of Contemporary Arabic/ Early English Books Online / Corpus of Middle English / al-Maktaba al-Shamela / Perseus Digital Library / Biblioteca Virtual Miguel de Cervantes / Digital Library of Old Spanish / MSU Humanities Data / Visualising English Print / King Saud University Corpus of Classical Arabic / Open Islamicate Text Initiative / Open Greek and Latin / Open Medieval French/ Gumar Corpus

What is difference between simple/advanced keyword search and having the "whole text?"

Using the Project Gutenberg, we will choose 5 related texts for Monday's course.

Blog Post #1: Think back to class 5 "What I discovered about digital projects" (to be posted the day before the next class begins, that is Monday 2 Oct) Also, transfer your personal digital narrative (class 2) to a PAGE on your blog in your web hosting. Students are encouraged to learn to make full use of their own domain over the course of the semester and experiment with different modes of digital representation of their work.

Week 5

9 (Mo 2 Oct) Using some code to explore electronic text; the Programming Historian

Preparation before class: Check out **Voyant Tools** and **Antconc** (there are lots of videos on YouTube about the latter). What do they do? What is "distant reading"?

Download **RStudio Desktop** (free)

Read: Gardiner/Musto (DHP), 31-42 "The Elements of Digital Humanities: Text and Document;" Cooney/Roe/Olsen "The Notion of a Textbase" and Arnold/Tilton's Programming Historian lesson here

Do some preliminary research on the 5 texts we chose to find out what you can about them.

Can you display some of your results in your web hosting? How?

Blog Post #2: Think back to class 6 and the notion of computational thinking. In this posting please reflect on what we have done so far in the course that has required a shift in your thinking or even new skills. (Due before Monday 9 Oct)

10 (We 4 Oct) Programming Historian Lesson (continued)

Read Schriebman, Non-Consumptive Reading; Sample "The Poetics of Non-Consumptive Reading"

Instructor shows an example of scaling up: working with a supercomputer and a workset in the HathiTrust Research Center.

Week 6

11 (M 9 Oct) away – walk through the Programming Historian tutorial & checking results.

12 (W 11 Oct) away – guest lecture by Craig Protzel (NYUAD IM) on basics of html/javascript

Week 7

13 (M 16 Oct) Digitizing Text: A hands on exercise in OCR for English and non-English texts

We will meet in the Center for Digital Scholarship (NYUAD Library) to try out Optical Character Recognition in different languages using the software <u>Abbyy Fine Reader</u> for Mac and PC. Please bring a print out of a page of a text interesting to you in a language that you know. If possible, bring one in a language other than English.

14 (W 18 Oct) When OCR is bad or doesn't work, how do we create a corpus?

Preparation for class: download GitHub Desktop

Text creation initiatives: EEBO TCP, EECO, Typewright, LLBeirut.

We will try crowd transcription exercises in class using Typewright and LLBeirut.

Fall Break 23-28 October!

Week 8 - MODIFIED

15 (M 30 Oct)

Recap: where we have been, where we are going; Pausing to imagine a project

Reading for class: D_H 61-71

Blog Post #3: Think back to classes 13 and 14 and the problem of computer vision, optical character recognition (OCR) and the human labor and judgment required to create text. In this posting please reflect on what we did, the languages you used, the errors you found (common and uncommon) and suggest a text you would like to see in electronic form that isn't already.

16 (W 1 Nov)

Structured, encoded texts

TEI and the R package for TEI

Week 9

17 (M 6 Nov) Pausing to think about Infrastructures Berry/Fagerjord ch 5

What are the "analog" infrastructures of universities? the "digital" infrastructures? What have we used so far in this course that can count as infrastructure?

18 (W 8 Nov) Exploring the spatial dimension of the Digital Humanities

Check out a few of these projects before class and take some notes on one of them for presentation in class:

Mapping Dante / Mapping the Lake District: A Literary GIS / LOTR / leldran / Slave Revolt in Jamaica / Mapping Beirut Print Culture /Stories of the Susquehanna / Map of Early Modern London / Visualizing Medieval Places / Peripleo / BL.UK Georeferencer / Life of Maya Angelou / NYC Space/Time / HistoryPin / Mapping Jerusalem / Mapping Gothic France / Beirut Bus Map Project / London Chatty Map / Mapping Architecture in Germany / HGIS de la Indias / Year of the Riot, Harlem 1935 / Geography of the Post /Panorama / Z-axis mapping / Going to the Show / Voyages (Trans-Atlantic Slave Trade Database) – animation feature / Novel City Maps /

Optional: watch Geospatial Revolution <u>Episodes 1 2 3 4</u> and listen to the BBC 4 Digital Human <u>podcast</u> on maps (begins at 1:40).

There is not a lot of digital humanities mapping of the Middle East underway. What kinds of cultural and historical mapping might we imagine spearheading?

Blog Post #4: If you were to design a digital humanities research project that brought texts and maps into dialogue, what would you want to do? What kinds of sources would you need? Thinking about Berry/Fagerjord's ch 5, what kinds of "platforms for data and computation" (83) might a researcher want or need? If a lab for texts and maps were to come into existence what kind of large projects might they take on? COuld you imagine them to have a "social life"? (D_H 73-98).

Optional Digital Humanities Session

Tu 14 Nov 3-4pm (CDS, Library room 339) Melitte Buchman (NYU Bobst Library, Digital Content Manager), on Digital Media Preservation Basics: Melitte will cover issues related to the long-term preservation of digital images and video as well as quality assurance and technical metadata for both video and imaging.

Week 10

19 (M 13 Nov) Exploring Spatial Data; Spatial Data as Model

Making a NYU Carto academy **account**. Looking at **Palladio**.

Further documentation on Carto and Palladio. Taking a look at the Christine de Pisan dataset.

Blog #5 On spatial projects. What did you learn about the spatial humanities projects that you explored? What spatial dimension are they actually demonstrating? What is the relationship between design, data and results that you found? Can you think of another topic (perhaps from your immediate surroundings) that would be interesting to tell a spatial narrative about that resembles the one that you presented?

20 (W 15 Nov) Creating Spatial Data for the Humanities

The Exploring French of Italy **datasets**. (Additionally, the top 50 places **dataset** and presidential **dataset** from Nodegoat).

Digital narrative #2: Please rewrite the digital narrative from the beginning of the semester. Do not overwrite it but create a new one as make it a "child" page to the first. What kinds of new ideas of the digital have you been exposed to this term? Which ones do you enjoy the most? Are there any that you disagree with? What new skills do you think you would like to learn?

Optional activity: Opening of the Birmingham Qur'an Manuscript Digital Exhibition, Sunday 19 Nov, 630pm, Umm al Emarat Park, Abu Dhabi (transportation provided)

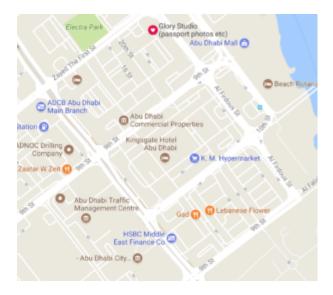
Week 11

21 (M 20 Nov) Trying out **Recogito** and with a Text from the ECCO corpus (D'Israeli's Majnoun and Leila chapter — in Drive) Link to shared text **here**.

Text Mapping: Trying out **TopoText** (documentation **here**) and the **Edinburgh Geoparser**using EEBO text

22 (W 22 Nov) Set up of Makeup Class on Saturday

We will focus on this area.



Blog #6 On digital humanities in other languages. Digital Humanities have been undergoing a rapid internationalization in recent years. In some countries there is a word for the concept, in others there are practitioners without necessarily the tag DH. Since we all have looked at other languages and data from around the world, I would like for this posting for you to go exploring in one language other than English to see what kinds of non-English DH exist. What kinds of topics are most prevalent in these language groups? Is digital humanities research being done in the countries of those languages or outside? Is publication taking place in that language or in another? Be sure to include links. Feel free to write this post in a language besides English. Hints: 数字人文/數位人文; humanidades digitales; humanités numériques/digitales; limitique lines.

Makeup class (Tuesday, 28 Nov, am and pm)

Makeup class in the field: Creating Spatial Data with Smartphones

Read: Wrisley/Hawat/Rahme, "Creating GeoTagged Humanities Data..."

Take a look at the Linguistic Landscapes of Beirut and its recent writeup in CityLab, the NYU digital project that inspired it, Art and Politics in the City, the NYU Shanghai map of Street Food.

Initial digital narrative (5%) Students will write a digital literacy narrative at the beginning of term. It should include the strategies they currently employ in their daily and academic lives for content creation, social interaction, data manipulation and analysis. This will make up the page on the

student's own web hosting site. It will be revised both at midterm and at the end of the term and assessed for growth and reflection.

Blog roll (35%) There will be short writing assignments approximately every other week (7 total, i.e. 5% per post). The format for this will be a blog, a key form of 21st-century public writing. They will be either reflective pieces on a conceptual issue that has arisen in class or a report or review about a project or experiment carried out. The main issue here is to learn to communicate ideas in an open forum and to develop a voice for research blogging. Students will learn how to install an instance of WordPress.org and to choose a theme appropriate to representing embedded digital materials. (Students who are proficient in other blogging platforms or sustainable web development may opt for those). Students choose at the end of the term if you keep your blog or if you delete it. See http://hosting.nyu.edu for more details.

Participation (10%) I expect active participation from all students and non-students in the course. This course will require experimentation with new digital environments and a willingness to try and fail. Between the course meetings, students may have to investigate a problem to learn how to do it themselves— taking initiative will be rewarded. In addition, we come to the course with different skills and helping out fellow students and fostering a collaborative spirit in the classroom will be rewarded. A laptop will be essential for almost every session. Participation will be assessed by the extent to which the students have prepared for in-class discussion and are ready to address the thought questions found in this syllabus.

Project portfolio (50%) Over the course of the term, we will engage in project-based learning. Each student will carry out one individual mini-project using the ideas and methods we have covered in class and will participate in one collective text analysis and mapping project about historical materials related to the region. The mini projects will be experimental and necessarily small in scope (a piece of encoded text, a topic model, a spatio-temporal narrative, a map), but will require reflective analysis and contextualization. In addition to completing some of the work of the individual project, students will dream up new steps for the project, ways that it can be expanded. We will begin to work on these around the midterm and continue through the semester. They will be assembled in a blog portfolio with reflective essays before the last week of the term. The personal project will count for 35% and the collective project for 15%.

Around the midterm, students will have the opportunity to collectively renegotiate the assessment breakdown, if they so desire.

Policies

Openness: One of the characteristics of the digital humanities is its open, public quality. Most of the work in this course you will be documenting in a site you create in your own NYU web hosting. It is a new and interesting experience for students to work in the open, since it asks us to think about our audience more than if we were only writing a paper for a single person to read. You will have your own web address in the form {avatar}.hosting.nyu.edu. You can use your own name if you want, or you can chose an avatar. If you do not want your postings to be public and open, it is possible for them to be protected with a password that you share with the instructor. At the end of the semester once all is graded, you can keep or delete your work. Your web hosting will remain active as long as you are a student at NYU.

Attendance and participation: *Attendance* and *participation* in class will be an essential part of the final grade. *Attendance* means that you are present and that you bring your laptop. Class *participation* means that you come prepared to discuss the materials, that you speak up when you have something relevant to say and that you are respectful of all students' desire to speak.

Attendance Policy: The course is based on regular, progressive exercises. It is required for students to attend course. A maximum of three absences in the semester is allowed, but not suggested. After this point, the instructor reserves the right to remove the students from the class.

Device policy: Devices are allowed, even encouraged, in the course since they provide multiple points of access to information in our age. This does not mean a phone. You should not text in class. We will discuss "digital drift." You should close applications that are not class related. In the case of some exercises and/or assessment you will be asked to close or put away your devices. Device abuse may require the instructor to revise this policy.

Other Course policies

- If you must leave class early, inform me in advance.
- If you know that you have to miss class, please inform the instructor ahead of time, and preferably in writing. Staying in communication is the key.
- Students should make sure the readings are downloaded to a device and that you have read them on the day they are required and that you have jotted down notes about them.
- Excused absences should come from a physician or a counselor, and are subject to verification.

Integrity: Academic integrity and honesty are central components of a student's education. Ethical conduct maintained in an academic context will be taken eventually into a student's professional career. Academic honesty is essential to a community of teachers and learners. Anything less than total commitment to honesty undermines the efforts of the entire academic community.

NYU Abu Dhabi expects its students to adhere to the highest possible standards of scholarship and academic conduct. Students should be aware that engaging in behaviors that violate the standards of academic integrity will be subject to review and may face the imposition of penalties in accordance with the procedures set out in the NYUAD policy.