# **Introduction to Digital Humanities**

Architectures of Knowledge

The cultural record of humanity is undergoing a massive and epochal transformation into shared analog and digital realities. While we are familiar with the history and realities of the analog record—libraries, archives, historical artifacts—the digital cultural record remains largely unexamined and relatively mysterious to humanities scholars. In this course you will be introduced to the broad field of Digital Humanities, theory and practice, through a stepwise exploration of the new architectures and genres of scholarly and humanistic production in the 21st century.

The course combines a seminar preceded by a brief lecture, and a digital studio. Every week we will move through our discussions in tandem with hands-on exercises that will serve to illuminate our readings and help you gain a measure of computational proficiency useful in humanities scholarship. You will learn about the basics of plain text, file and operating systems, data structures and internet infrastructure. You will also learn to understand, produce and evaluate a few popular genres of Digital Humanities, including, digital editions of literary or historical texts, collections and exhibits of primary sources and interactive maps. Finally, and perhaps the most important lesson of the semester, you will learn to collaborate with each other on a common research project.

# General

# **Course Info**

## **Yale University**

Introduction to Digital Humanities Architectures of Knowledge

Fall 2024 SPAN 845 | SPAN 291 | CPLT 606 | FREN 945 | HUMS 387

Humanities Quadrangle 109 MW 9:00AM-10:15AM

#### Instructor

## Prof. Alex Gil

Office: Humanities Quadrangle, Room 439

In Person Office Hours: Mondays, 10:30AM-12PM.

e-mail: alex.gil@yale.edu

#### Course Format

This course will take two distinct forms: Mondays will consist of a seminar preceded by a brief lecture; and, Wednesdays we will have a digital studio where you will receive tutorials and work in teams to build and learn. In addition, students will be asked to participate in asynchronous community combined with online annotation exercises using <a href="https://doi.org/10.2016/j.j.gov/hes.is">https://doi.org/10.2016/j.j.gov/hes.is</a>, and community knowledge building.

#### Requisites

An interest in questions of art, history, law, culture, philology and critical theory—in short, all that we shape, which shapes us in return... and a laptop computer.

#### Course Materials

All readings in this course will be provided *free to you*. Many articles and book chapters will be available for participants in the class on our shared drive following fair use guidelines. Other articles, and even books listed on the schedule will be available on the web open access. You fill find the appropriate links for all course materials in <u>the course schedule</u>.

#### Assessment and Grading

- 20% Online Participation
- 20% Class Participation
- 20% Midterm Review
- 30% Team Research Project
- 10% Pop Quiz

To learn more, please visit the <u>assignments page</u>.

#### **Fundamentals of Computing**

This course shares much with peer courses at other institutions. You will study several genres of Digital Humanities, and get a sense of the wide range of practical possibilities available to you now, or in the future. One important difference, though, between this course and that of our peers is that ours does not spend too much time on the field of Digital Humanities itself qua field. Our course hovers instead between two gravitational

centers: the architectures behind the scholarly and cultural record (the Humanities, sort of), and what we could call fundamentals of computing (the Digital, sort of).

Even though there are no technical requirements prior to you joining the class, you will be expected to play with new tools and learn new concrete technical skills throughout the semester. Even though you will be exposed to several "user friendly" tools and genres of Digital Humanities, the accent will be placed on symbolic computation. This will involve a completely different way of understanding and using your computer for many of you. The course is designed to guide you through these beginner steps in a way that hopefully minimizes the sense of alienation you may feel. These "fundamentals" serve as the basis for most artisanal practices in the Digital Humanities and beyond. In this sense, the course also serves as a friendly introduction to computation for Humanities majors or graduate students. You will not be expected to be a full-time programmer at the end of the course, or even "learn how to code," but you will be expected to understand many related concepts, and even do a thing or two using symbols instead of clicks. Towards the end of the course, we will build on these fundamentals to improve our computational skills in order to begin to use algorithms and other computational techniques to study and manipulate cultural corpora at various scales.

In addition to computing, you will also be introduced to some basics of Design and Project Management throughout the course. Design, because it shows we care about our audiences and our imagination grows in unexpected byways therein, and Project Management because projects need to be properly scoped and organized in order to become a reality in time without breaking our backs or bruising our bonds to one another.

## Modalities of Engagement

I learned the ropes of Digital Humanities with a cohort of graduate students, as part of the <a href="Praxis Program">Program</a> at the University of Virginia. Over the course of an academic year, our cohort worked to build a tool that allowed users to annotate a shared text, and compare their annotations after—team and project were central to my own learning. In order to be able to build Prism, the Praxis Program taught us the fundamentals of computing, design, project management, and collaboration. Since then, collaboration has been a mainstay of my professional practice. I do not expect any of you to be a natural at it. My own cohort surely had growing pains. True collaboration, presence and engagement with each other will be our overriding aspiration in this course. Below are some considerations in the form of a code of conduct to get us started thinking about our work together.

This code of conduct borrows from the stellar model outlined by Northeastern's <u>Feminist Coding Collective</u> combined with our <u>tenets at the xpmethod lab at Columbia University</u>.

- It's okay not to know: Assume that no one inherently knows what we're learning.
   We all come to this class with different backgrounds and abilities; none of us (including the instructor) will know everything and that is okay! Encourage a space where it's okay to ask questions.
- Be respectful: Do not use harmful language or stereotypes that target people of all different gender, abilities, races, ages, ethnicities, languages, socioeconomic classes, bodies, sexualities, and other aspects of identity. Respect each other in both physical and digital spaces.
- Architectures of power: Be mindful of the room's physical arrangement. HQ307
  was designed for a now musty pedagogical model. At the beginning of digital
  studio and seminar we will re-arrange chairs away from the unidirectional
  arrangement. Locations of power, such as the lectern or the center of the room,
  should be systematically ceded or inverted.
- Economy of attention: Think carefully of other people's time. Yield the floor and delegate authority. Come to definite conclusions that let people know that you are done. Conversations should move to various islands. Structure and preparation is a sign of respect for your audience. Ask questions. Listen more than you speak.
- Polyglossia: Help bring a multiplicity of voices into the space. Allowing other
  voices to be heard means also moderating one's own. Be aware of the strength
  and the reach of your voice. Soliloquies should be punctured by moments of
  quietude and reflection, giving time and space to those hesitant to join in the
  discussion. Watch for cues of others trying to speak but being interrupted or
  denied the opportunity.
- Ethics of shared labor: Make labor visible. Keep a manifest of project work done, to the extent possible. Be aware of credit hierarchies. Prioritize the exposure of junior colleagues. Outside of class, credit the involved collectives and encourage others to read through the records carefully for granular attribution.
- COVID-19 awareness: We are experiencing a new surge. Please be mindful of others' health and safety. If you are feeling unwell, please stay home. We will make arrangements for you to catch up on missed work.
- Academic Integrity: Please refer to <u>Yale's regulations</u> for more information.

Accessibility

Our institution values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, please notify me, your instructor, as soon as possible. Disabled students are also welcome to contact <a href="Student Accessibility Services">Student Accessibility Services</a> to discuss a range of options to removing barriers in the course, including accommodations.

## Acknowledgments

In developing this course, I learned from many people, but I particularly thank Roopika Risam, Ryan Cordell, Miriam Posner, Jentery Sayers, Lauren Klein, Marisa Parham and Whitney Trettien for graduate syllabi and ideas from which I drew particular inspiration. In general, I would not be introducing you to Digital Humanities today if it wasn't for Bethany Nowviskie, Jeremy Boggs, Wayne Graham, David McClure, and the rest of the Scholars Lab crew at the University of Virginia, circa 2010. They taught me many of the fundamentals I hope to pass on to you this academic year.

# **Assignments**

## Online Engagement

During the semester you will engage in online annotation and dialogue over one of our readings. We will use the tool <a href="https://www.hypothes.is">hypothes.is</a> in order to do our annotations and exchanges. I will distribute a sign-up sheet, and you will be able to sign up for the one you want to annotate.

Besides our annotation exercise, we will build a <u>common vocabulary sheet</u> together using Google Docs. If I'm doing my job right, you will be exposed to a large number of new technical terms and concepts this semester. Sometimes it's hard to keep track of them all. The shared glossary will help us keep track of them, and will become the foundation for a pop quiz at some surprise point during the semester.

## Class Engagement

This course requires us to be present for each other. You will lead discussion once during the semester. You will be responsible for the readings and the discussion questions.

Being present to each other, though, doesn't necessarily mean speaking during seminar. You really don't have to if you don't feel like it outside of that one class where you will lead discussion. What's the point of requiring you to? That said, it is important that we are there for each other, helping each other out, doing our part, asking questions when

we don't understand something, answering them when we do. For the duration of the semester we are a collective, the team we have—Yankees or Bad News Bears, we are what we got.

#### Midterm Review

In this exercise you will choose a public digital humanities project and write a brief review. Before you embark on your own final project, we must first learn to develop some vocabulary together to help us evaluate the quality of a project. In this midterm exercise you will practice just that. Akin to a book review or book report, the review will allow you to look at an existing digital scholarship project in depth and provide us with your evaluation of it.

#### The Final Team Project

Working with a small team of your peers, you will build a relatively simple digital humanities project together. In the process of doing so you will practice many of the skills you will learn during studio hours this semester, and experience the ins and outs of working with others on a shared research project. This assignment will be contract graded.

## Schedule

#### Week 0

Inaugural Lecture by Prof. Alex Gil

#### Week 1

Everything, Everywhere, All At Once: The (Digital) Cultural Record Seminar | Wednesday, September 4

#### To Read

- Borges, Jorge Luis. "<u>The Congress</u>"; "<u>El Aleph</u>."
- Burdick, Anne, et al. <u>Digital\_Humanities</u>. MIT Press, 2012.
- Risam, Roopika. "Introduction: The Postcolonial Digital Cultural Record." New Digital Worlds: Postcolonial Digital Humanities in Theory, Praxis, and Pedagogy. Northwestern University Press, 2018.

### To Explore

• Reviews in DH. Edited by Jennifer Guiliano and Roopika Risam.

#### Studio

Exercise: Building the Actual Global Library of All Things

#### Week 2

Letters: Surface and Depth, WYSIWYG... or not.

Seminar | Monday, September 9

- Hayles, N. Katherine. "Print Is Flat, Code Is Deep: The Importance of Media-Specific Analysis"
- "Introduction." Tenen, Dennis. *Plain Text: The Poetics of Computation*. Stanford: Stanford University Press, 2017.

Studio | Wednesday, September 11

- What is Plain Text?
- Tutorial: Microsoft Visual Studio Code (Please install before class)

#### Week 3

Documents: Files, Types and Cabinets

Seminar | Monday, September 16

- Bush, Vannevar. "As We May Think." The Atlantic, July 1945.
- Tagg, John. "The Archiving Machine; Or, The Camera and the Filing Cabinet." Grey Room, no. 47 (April 1, 2012): 24–37.
- Vismann, Cornelia. <u>"Preface" and "Law's Writing Lesson"</u> in *Files: Law and Media Technology*. Translated by Geoffrey Winthrop-Young, Stanford University Press, 2008: 1–38.

To Skim

Kernighan, Brian W, and Rob Pike. "The File System" in <u>The UNIX Programming</u> <u>Environment</u>. Englewood Cliffs, N.J.: Prentice-Hall, 1984: 41–65.

To Explore

Your file system and storage

Studio | Wednesday, September 18

• Tutorial: Terminal basics

• Tutorial: <a href="Pandoc">Pandoc</a> (Please install before class)

### Week 4

Editions: The Point is to Change It Seminar | Monday, September 23

- Sahle, Patrick. "What Is a Scholarly Digital Edition?" <u>Digital Scholarly Editing</u>:
   <u>Theories and Practices</u>, edited by Matthew James Driscoll and Elena Pierazzo,
   Open Book Publishers, 2017, pp. 19–39.
- McGann, Jerome. "Introduction." Radiant Textuality: Literary Studies after the World Wide Web. 1st edition, Palgrave Macmillan, 2001.
- Examine: The Shelley-Godwin Archive; The Rosetti Archive

Studio | Wednesday, September 25

• Tutorial: Ed

Tutorial: Markdown

#### Week 5

Bibliographies: Search Results, Works Cited, Syllabi, Catalogues, Shout-outs and If You Liked This Maybe You will Like That

Seminar | Monday, September 30

To Read

- Ahmed, Sara. "Introduction: Bringing Feminist Theory Home." Living a Feminist Life. Durham: Duke University Press, 2017. [Yale Library access]
- Coman, Jonah. "<u>Trans Citation Practices a Quick-and-Dirty Guideline</u>." Medium, 18 Mar. 2021.
- Godin, Benoît. "On the Origins of Bibliometrics." Scientometrics, vol. 68, no. 1, July 2006, pp. 109–33. akjournals.com.
- Tanselle, G. Thomas. "Table of Contents." *Introduction to Bibliography*. Book Arts Press, 2002.

#### To Explore

<u>The Open Syllabus Project</u>; Goldsby, Jacqueline, and Meredith L. McGill. "<u>Black</u> Bibliography Project."

Studio | Wednesday, October 2 | Virtual

- Ed continued
- Zotero

Data: Given and Taken, then We Use It as a Brush.

Special Guest: Dr. Lauren Klein Seminar | Monday, October 7

To Read

- Klein, Lauren F., et al. "Every Datapoint a Person." Data by Design. 2024.
- Drucker, Johanna. "<u>Humanities Approaches to Graphical Display</u>." Digital Humanities Quarterly, vol. 005, no. 1, Mar. 2011.
- Sá Pereira, Moacir P. de. "Representation Matters." Torn Apart/Separados. June 2018. xpmethod.columbia.edu.
- Hartman, Saidiya. "Venus in Two Acts." Small Axe, vol. 12, no. 2, 2008, pp. 1–14.

#### To Explore

- Torn Apart/Separados
- (Un)Silencing Slavery

Studio | Wednesday, October 9

- CSVs
- YAML

## Week 7

Libraries: Exhibits, Archives, Collections, Databases

Seminar | Monday, October 14

Discussion Lead: Luis

- Wilson-Lee, Edward. (<u>Selections</u>). The Catalogue of Shipwrecked Books: Young Columbus and the Quest for a Universal Library. EPub edition, William Collins, 2018.
- da Silva, Natália Marques, et al. "<u>Digitization as Revival: A Case Study of the Musée Ogier-Fombrun</u>." archipelagos journal, no. 6, Mar. 2020. archipelagosjournal.org.
- Berry, Dorothy. "<u>Take Me into the Library and Show Me Myself: Toward Authentic Accessibility in Digital Libraries</u>." Transactions of the American Philosophical Society 110, no. 3 (2022): 111–26.
- Examine: La Gazette Royale d'Haïti; Colored Conventions Project

OCTOBER RECESS 🍂

## Week 8

Algorithmic Approaches to Corpora: Analysis

Seminar | Monday, October 21

Discussion Lead: Grace

To Read

 Underwood, Ted. Distant Horizons: Digital Evidence and Literary Change. Chicago, IL: University of Chicago Press, 2019.

#### To Explore

## The Viral Texts Project;

Studio | Wednesday, October 23

Tutorial: Voyant Tools

## Week 9

Algorithmic Approaches to Corpora: Creation

Seminar | Monday, October 28

Discussion Lead: Nuria

To Read

- Borges, Jorge Luis. "<u>The Library of Babel</u>" (1941); "<u>Tlön, Uqbar, Orbis Tertius</u>" (1940)
- Tenen, Dennis. Literary Theory for Robots: How Computers Learned to Write (A Norton Short). [Introduction, chapters 1, 2, 5 and 7]
- Ramsay, Stephen. "Potential Readings." Reading Machines: Toward an Algorithmic Criticism. University of Illinois Press, 2011.

#### To Explore

- Basile, Jonathan. "The Library of Babel" (2015)
- Montfort, Nick and Stephanie Strickland. "Sea and Spar in Between." The Winter Anthology. 3. (2011)

#### Studio

• Tutorial: Co-Pilot

## Week 10

**Our Themes** 

Seminar | Monday, November 4

Discussion Lead: Ji

This week is dedicated to themes you want to explore.

Studio | Wednesday, November 6

Project work

#### Week 11

Craft: Collaboration, Divisions of Labor, Project Management Project Work | Monday, November 11, Wednesday, November 13

Setting up our team.

To Explore

The Praxis Network

## Week 12

Machines: Minimal Computing, Computing a little

Seminar | Monday, November 18

Discussion Lead: Alejandra

To Read

Risam, Roopika, and Alex Gil. "<u>Introduction: The Questions of Minimal Computing</u>." Digital Humanities Quarterly. 16.2. 2022

To Explore

A replica of the Turing machine

Studio | Wednesday, November 20

• A very gentle introduction to algorithmic thinking and practice with Python

## Week 13

Exeunt to the World: Workers of the record, unite!

Seminar | Monday, December 2 Discussion Lead: Sophia and Keiara

• Benjamin, Ruha. "<u>Default Discrimination</u>." Race after Technology: Abolitionist Tools for the New Jim Code. Polity, 2019.

• The Nimble Tents Toolkit

• pirate.care.syllabus 🐙

Examine: SUCHO

The Final Week

Curtains: Nerves, Celebration and Joy

[Location TBD]

On the final week we will simply celebrate each other's works and collegiality.