# Introduction to Digital Humanities - Tufts University, Fall 2025



Figure 1: Bandeau de Manifest des Digital Humanities by Michael Cixous, Public Domain, via Wikimedia Commons

#### **Details**

Time: T 6-9pm

Location: Eaton Hall 371

Instructor: Charles Pletcher (charles.pletcher@tufts.edu)

Instructor Office Hours: TTh 3-4pm

### **Prerequisites**

None

### **Description**

In a recent article in the *New Yorker*, Princeton professor D. Graham Burnett observes, "But to be human is not to have answers. It is to have *questions*—and to live with them. The machines can't do that for us. Not now, not ever" ("Will the Humanities Survive Artificial Intelligence?", April 26, 2025). For us to grapple with what "the machines" mean to us—or, in bleaker terms, what business-types want artificial intelligence (AI) to mean for their bottom lines—we must first understand the limits of what the machines can do.

This course explores the so-called "digital humanities" with a view towards the role of computational methods, including AI, in the humanistic disciplines. This exploration will entail learning to view textual and material objects of study from new angles, but it also involves learning how to scrutinize each angle of interpretation.

Beginning with workshops on textual encoding, students will gain exposure to diverse disciplines at the intersection of data science and the humanities, from Geographic Information Systems (GIS) to Natural Language Processing (NLP), generative art and music, and network analysis.

Students will gain familiarity with the Python programming language, as well as tools like Voyant, TEI XML, ArcGIS, and Gephi. Through readings ranging from antiquity to the present, students will learn about the history of the digital humanities and engage in code criticism.

Assessments include weekly quizzes or discussion posts, collaborative projects, and a final cumulative project of each student's design.

# Learning objectives

Successfully completing this course will equip students to

- 1. Explain what the digital humanities are and how they relate to other forms of humanities research;
- 2. Write and execute basic Python scripts;
- 3. Pre-process a text/corpus in preparation for natural language processing;
- 4. Parse complex data structures such as Python dictionaries and Pandas data frames;
- 5. Apply digital methodologies of various kinds to humanities related data;
- 6. Evaluate the methodologies and results of digital humanities projects.

### **Textbooks**

### Required

(These are all either open-access or available through the Tufts Library's digital subscriptions.)

- William Mattingly. Introduction to Python for Humanists. 2022. https://python-textbook.pythonhumanities.com/
- James O'Sullivan, ed. The Bloomsbury Handbook to the Digital Humanities. Bloomsbury, 2022.
- Plato. Statesman. Philebus. Ion. Translated by Harold North Fowler, W. R. M. Lamb. Loeb Classical Library 164.
   Cambridge, MA: Harvard University Press, 1925. https://www.loebclassics.com/view/LCL164/1925/volume.xml

#### Recommended

• Dennis Yi Tenen. *Literary Theory for Robots: How Computers Learned to Write.* W.W. Norton & Company, 2024. Other readings will be provided through the course website.

### Schedule

See the file located at schedule.md for the most up-to-date list of assignments.

## Grading

- 1/6 Attendance and participation
- 1/6 Reading quizzes
- 1/3 Labs and midterm projects
- 1/3 Final project

This class will use the following grading scale, after applying the above weights:

- ≥ 90%: A
- 80-89%: B
- 70-79%: C
- 60-69%: D
- < 60%: F

Plusses and minuses will be appended to letter grades at the instructor's discretion.

### 1/6 Attendance and participation

As we only meet once a week, missing even one class could leave you far behind. Although much of the material will be posted online, class time will be used to troubleshoot, debug, and debrief (read: "vent about how hard programming is").

Obviously emergencies happen, and everyone is allowed one (1) unexcused absence. Further unexcused absences will result in a deduction of half a letter grade *from your final grade*.

Excused absences are easy to obtain: please just give me as much notice as possible. (I try to keep track of religious holidays, but a heads-up is always appreciated.)

#### 1/6 Reading quizzes

Starting in Week 2, we will have a reading quiz approximately every other class. These quizzes are not meant to be punitive. Rather, think of them as 10 minutes or so to reflect, as cogently as you can, on specific aspects of the reading.

At the end of the semester, I will drop the lowest one (for graduate students) or two (for undergraduates) reading quiz scores when calculating your average for the term.

### 1/3 Labs and midterm projects

We will start a lab in class approximately every other week; the lab will be due at 11:59 p.m. following the next class.

Each lab will also ask you to write a short but detailed reflection on your process and what you have learned. These short essays are meant to help you as you decide on your midterm and final projects.

Think of the midterm project as the final project in miniature. This is a chance for you to experiment with a methodology or take the next logical steps with a lab. If it works, take the project even further for the final; if it doesn't, the final project gives you a mulligan. **Null results are valid here.** 

### 1/3 Final project

The final project is a chance for you to demonstrate your mastery over some aspect of digital humanities that we have covered during the semester. Start thinking early about what experiments you might want to run or what tools/resources you might want to build for your final project, and feel free to send me an email or come to office hours as soon as you have ideas.

#### Statement on AI

(Adapted from "Artificial Intelligence" by the Tufts' Center for the Enhancement of Learning and Teaching)

In this class, we will adhere to the following guidelines regarding the use of generative artificial intelligence (GAI):

- 1. **NEVER** submit AI-generated work as your own. To do so is considered a violation of Tufts' [Academic Integrity Policy] (https://students.tufts.edu/community-standards/academic-integrity/academic-integrity-overview).
- 2. Familiarize yourself with the limitations of GAI tools. These tools all come with inherent biases, and they all make mistakes. Be aware that no matter how "confident" the AI seems, it does not actually "know" anything.
- 3. Cite all uses of AI. See suggestions from the Chicago Manual of Style and the MLA.
- 4. In addition to citation, please identify *how* the GAI contributed to your work. (Your explanation need not be more than a sentence or two.)
- 5. If have any questions, please contact me by email, during office hours, or in class.

### **Policies**

#### Attendance

Emergencies arise. Everyone is permitted one unexcused absence. If you will need to miss additional classes, please let me know as soon as possible.

Each subsequent unexcused absence will result in a deduction of half a letter grade from your final grade (i.e., an A will become an A-, an A- will become a B+, etc.).

You are responsible for catching up on any work that you have missed, either by coming to office hours or working with a classmate. As a rule, I will not share lecture notes outside of what is already available on the course website.

**Heads-up about Thanksgiving** We will be having class on the Tuesday before Thanksgiving. As a once-weekly class, each session is too important to miss. Please make your travel plans accordingly.

#### Food and drink

Please eat only during breaks. (We'll have one about halfway through each class.)

Otherwise, please stay hydrated.

### **Sharing**

This course is designed for everyone to feel comfortable participating in discussion, asking questions, learning, and facilitating the learning of others. In order for that atmosphere to be maintained, the recordings of our conversations will only be shared with the enrolled students in the class (not posted publicly) and it is prohibited for any of us who have access to the video to share it outside the course. Similarly, I have specifically designed the exams, handouts, and lectures for the people who are enrolled in the course this term and those may not be shared outside this course. All of this content is freely available on GitHub under a Creative Commons license — attribution is all that is required.

### Resources

#### Religious accommodations

Tufts University faculty, staff, and administration highly value and acknowledge the religious diversity of its student body. Students seeking religious accommodations related to their holy days are encouraged to collaborate with faculty to make arrangements during the first week of each semester. Consult the Multifaith Calendar for upcoming holidays, links to the University Religious Accommodations Policy, and members of the University Chaplaincy who are available to respond to questions on religious observances.

#### Accommodations for students with disabilities

Tufts is committed to providing equal access and support to all qualified students through the provision of reasonable accommodations. If you have a disability that requires reasonable accommodations, contact the StAAR Center at StaarCenter@tufts.edu or 617-627-4539. Please be aware that accommodations cannot be enacted retroactively, making timeliness a critical aspect for their provision.

### Academic support at the StAAR Center

The StAAR Center offers a variety of FREE resources to all students. Students may make an appointment to work on any writing-related project or assignment, attend subject tutoring in a variety of disciplines, or meet with an academic coach to hone skills like time management and navigating procrastination. Students can make an appointment for any of these services by visiting https://students.tufts.edu/staar-center.

### Student support, including mental health

As a student, there may be times when personal stressors or difficulties interfere with your academic performance or well-being. The Dean of Student Affairs Office offers support and care to undergraduates and graduate students who are experiencing difficulties, and can also aid faculty in their work with students. In addition, through Tufts' Counseling and Mental Health Service (CMHS) students can access mental health support 24/7, and they can provide information on additional resources. CMHS also provides confidential consultation, brief counseling, and urgent care at no cost for all Tufts undergraduates as well as for graduate students who have paid the student health fee. To make an appointment, call 617-627-3360. Please visit the CMHS website: http://go.tufts.edu/Counseling to learn more about their services and resources.

# Intro to Digital Humanities - Fall 2025 - Course Schedule

### **Abbreviations**

- BHDH: The Bloomsbury Handbook to the Digital Humanities, ed. O'Sullivan, 2022.
- PyHum: Python for Humanists, William Mattingly, 2022. https://python-textbook.pythonhumanities.com/

## 1. September 2

- Introductions
- Syllabus
- Plato's *Ion* (provided in class)
- Analogue text encoding exercise: Mark up as many pages of the *Ion* by hand as you can. (We will discuss details
  in class.) What features are important to emphasize? How do you want to identify different elements of the
  text?
- · Installing a text editor

#### Homework

- O'Sullivan, James. "Introduction: Reconsidering the Present and Future of the Digital Humanities." (BHDH pp. 1–4)
- Drucker, Johanna. "Normative Digital Humanities." (BHDH pp. 7–18)
- Hayles, N Katherine. "Print Is Flat, Code Is Deep: The Importance of Media-Specific Analysis." *Poetics Today* 25, no. 1 (2004): 67–90.

### 2. September 9

- Visit to Special Collections (Tisch 103)
- TEI Lab

### Homework

- TEI Lab
- TEI Consortium, "A Gentle Introduction to XML." https://tei-c.org/release/doc/tei-p5-doc/en/html/SG.html
- Buzzetti, Dino. 2002. "Digital Representation and the Textual Model."
- MLA, Digital Pedagogy in the Humanities, "Annotation"

### 3. September 16

- Text editor troubleshooting
- Discussion: What has been your experience with TEI so far? What resources did you draw on for your work? How do different textual models affect your encoding process?
- Introduction to Voyant: https://voyant-tools.org/docs/tutorial-tutorial.html
  - Assembling a corpus
  - Adding to a corpus
  - Distant reading

#### Homework

- Moretti, Franco. "Abstract Models for Literary History—1." In *Graphs, Maps, Trees: Abstract Models for Literary History*. Verso, 2007.
- Byszuk, Joanna. "On Computers in Text Analysis." (BHDH pp. 159–168)
- Schofield, Alexandra. "The Possibilities and Limitations of Natural Language Processing for the Humanities." (BHDH pp. 169–178)

### TEI Lab due tonight (September 16) by 11:59 p.m.

### 4. September 23

- · Reading quiz
- Discussion: How are we meant to read *with* computers? What kinds of critical practices does such reading enable?
- Torre, Silvia Gutiérrez de la. "Corpus Analysis with Voyant Tools." Translated by Eime Javier Cisneros Brito and Alberto Santiago Martínez. Programming Historian, no. 14 (June 2025). https://doi.org/10.46430/phen0128.
- · Voyant Lab

### Homework

- Voyant Lab
- Posner, Miriam. "What's Next: The Radical, Unrealized Potential of Digital Humanities" In *Debates in the Digital Humanities* 2016, edited by Matthew K. Gold and Lauren F. Klein. University of Minnesota Press, 2016. https://doi.org/10.5749/j.ctt1cn6thb.
- Ledesma, Eduardo. "Critical AI Studies and the Foreign Language Disciplines: What Is to Be Done?" *PMLA/Publications of the Modern Language Association of America*, October 8, 2024, 1–8. https://doi.org/10.1632/S0030812924000567.

### 5. September 30

- Discussion: What has changed between the publication of Posner's article (2016) and the publication of Ledesma's (2024)?
- In class: Read Petschesky, Barry. "It Took Many Years And Billions Of Dollars, But Microsoft Finally Invented A Calculator That Is Wrong Sometimes" in *Defector*, 20 August 2025. Link
- Discussion: In this class so far, what has been your experience using "old-school" tools like TEI XML encoding and Voyant, without the assistance of generative AI?

### Homework

- Dombroski, Quinn. "Does Coding Matter for Doing Digital Humanities?" (BHDH pp. 137-146)
- Da, Nan Z. "The Computational Case against Computational Literary Studies." *Critical Inquiry* 45, no. 3 (2019): 601–39. https://doi.org/10.1086/702594.
- Barrett, Paul. "Unjust Readings: Against the New New Criticism." *Digital Humanities Quarterly* 19, no. 1 (2025). https://dhq.digitalhumanities.org/vol/19/1/000764/000764.html

### Voyant Lab due tonight (September 30) by 11:59 p.m.

### 6. October 7

- (Last day to drop a class)
- (Last day to opt for pass/fail)
- (Tentative) GIS Lab led by Carolyn Talmadge

#### Homework

- · Finish GIS Lab
- Toth, Gabor Mihaly. "Women in Early Modern Handwritten News: Random Walks and Semantic Wanderings in the Medici Archive." *Journal of Digital History* 3, no. 2 (2024). link
- Hicks, Michael Townsen, James Humphries, and Joe Slater. "ChatGPT Is Bullshit." *Ethics and Information Technology* 26, no. 2 (2024). link
- Mandelkern, Matthew, and Tal Linzen. "Do Language Models' Words Refer?" *Computational Linguistics* 50, no. 3 (2024): 1191–200. link

### 7. October 14

- Discussion: How does AI shape our access to information? It what ways has it changed our epistemological environment? Can we reclaim anything that has been lost?
- Python environment setup
- PyHum 1 (The Basics of Python)
- Web Scraping Lab

#### Homework

- Eve, Martin Paul. "Open Access in the Humanities Disciplines." (BHDH pp. 223-232)
- Egan, Patrick and Órla Murphy. "Sharing as CARE and FAIR in the Digital Humanities." (BHDH pp. 267-272)
- Alvarado, Rafael. "Datawork and the Future of Digital Humanities." (BHDH pp. 361–372)
- · Web Scraping Lab

### 8. October 21

- · Reading quiz
- Discussion: What is datawork? What does it have to do with our work in this class, and how might it shape our understanding of DH in general?
- Python environment troubleshooting
- Web scraping debugging
- PyHum 2 (Data Analysis with Pandas)

#### Homework

Web Scraping Lab due tonight (October 14) by 11:59 p.m.

### 9. October 28

- Python debugging
- PyHum 3 (Natural Language Processing with spaCy)
- NLP Lab

#### Homework

- Herrmann, J Berenike. "Tool Criticism in Practice. On Methods, Tools and Aims of Computational Literary Studies." *Digital Humanities Quarterly* 17, no. 2 (2023).
- Kemman, Max. "Tool Criticism through Playful Digital Humanities Pedagogy." (BHDH pp. 287-294)
- Sichani, Anna-Maria. "Embracing Decline in Digital Scholarship beyond Sustainability." (BHDH pp. 317-324)
- NLP Lab

### 10. November 4

- Discussion: How do the tools that we use affect our understanding of the materials we study?
- PyHum 4 (Other Applications of Python)

### Homework

- Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." In *Illuminations*, edited by Hannah Arendt, translated by Harry Zohn. Schocken Books, 1969.
- Berry, David M. "AI, Ethics, and Digital Humanities." (BHDH pp. 445-458)

### NLP Lab due tonight (November 4) by 11:59 p.m.

# November 11 - No class (Veteran's Day)

# 11. November 18

- Discussion: How can we use computational methods responsibly in the humanities?
- PyHum 5 (Designing an Application with Streamlit)

### Homework

• Allen, Graham and Jennifer Debie. "Digital Humanities in the Age of Extinction." (BHDH pp. 459–465)

# 12. November 25

• In-class work and feedback on final projects

### 13. December 2

• In-class work and feedback on final projects

# December 20 - Final Projects Due