

Introduction to Digital Humanities:

A Conceptual and Practical Exploration for Advanced Undergraduate Students

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Office hours: CAB 313B, TTH 10:45-12: 15 (or on Zoom by email appointment)

Course Description

This course introduces to advanced undergraduate students the foundational concepts, common practices, and essential digital skills for developing a digital project in humanities disciplines. We first introduce the knowledge framework for conducting research in the digital age and the practices for managing a digital project. Then, we delve into four major topics: Text and Image Analysis, Visualization, Digital Media and Storytelling, and Ethics and Project Management. Each part constitutes a key component of DH work, and the four parts jointly provide students with the fundamental knowledge and skill infrastructure for creating and managing a digital humanities project. After taking this course, students will be able to take on a major DH-related question in their field and effectively present their research to the public audience.

This course requires no prerequisite and is suitable for students who wish to pursue innovative digital methods to advance their scholarly pursuits in any humanities field. It is preferred that students attend the course with a preliminary idea for a research paper or some familiarity with potential data or archival sources in their fields.

Course Objectives

Students will learn to understand the nature, scope, and characteristics of DH projects; identify resources for conducting quality and effective digital research; evaluate benefits and costs in chosen digital technical solutions; identify critical issues, challenges, and opportunities in DH research projects; apply DH methodologies and techniques used into broader scholarship and different disciplines.

Course Materials

This course adopts a wide range of textual and digital materials to support your study. Most of the materials are shared via Blackboard. Appropriate use of the shared course material, which includes not circulating with outside parties and uncopying any part of copyrighted material, is required for all students.

- Main text: Drucker, J. <u>The Digital Humanities Coursebook: An Introduction to Digital Methods for Research and Scholarship</u> (Routledge, 2021).
- See weekly schedule for a detailed list of readings and other materials.

Course Assignments and Projects

- DH Project Review (Literature, Technology, and Academic/Educational/Social Impact): students select a specific DH project to review its literature engagement, technologies used, and broad academic/educational/social impacts. The review needs to be 4-6 pages, double-spaced, 12-point Times New Roman font.
- **2. Final DH Project:** Students utilize the digital methods and tools discussed in the course to develop a *small or medium-scale* digital humanities project that addresses a specific humanistic question. The format of the project is open, and it can be a website, database, app, or demo. Teamwork is also encouraged (consult the instructor to seek approval before start).

Grading

1. Attendance (10%): Students are required to attend all class meetings. Attendance for each

class meeting is taken on a credit/non-credit basis in the formats of sign-up sheets, pop quizzes, and exit notes, among others. There is no make-up for missed attendance. Each absence results in a one-point deduction in your final grade. Exceptions can only be made with a doctor's note or other legitimate documentation for extreme conditions/causes.

- 2. Class Participation, including completing weekly readings and activities (20%): Students are required to fully engage in the class by asking and responding to questions, actively participating in discussions, carrying out group work, and performing other required class activities. The grade is based on the instructor's subjective, but very fair, evaluation of student involvement in class activities during the entire period of the course.
- 3. DH Project Review (Literature, Technology, and Academic/Educational/Social Impact) (20%): 4-6 pages, double-spaced, 12-point Times New Roman font, excluding references. See the above assignment description for details.
- **4. Final DH Projects (50%):** See the above assignment prompt.
- 5. Final Grade Scale:

A = 90 to 102, B = 80 to 89, C = 70 to 79, D = 60 to 69, F = 0 to 59. *Straight letter grades only, no plus or minus (+/-).

Course Policies

Academic Accommodations for Individuals with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us https://www.tamusa.edu/DisabilitySupport-Services/index.html or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services as soon as possible.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Financial Aid & Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which includes class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended the first week of class. Any student receiving Federal financial aid who dos not attend the first week of class will have his/her aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of his/her federal aid.

Academic Integrity Policy: Students at Texas A&M University-San Antonio are expected to adhere to the highest standards of academic honesty and integrity. Academic Dishonesty for which a student is subject to penalty includes <u>cheating, plagiarism, fabrication, multiple submissions, misrepresentation of academic records, facilitating academic dishonesty, unfair advantage, and ethical misconduct. This includes holding other students to the same standards and reporting any incidents of alleged violation of the honesty policy to the instructor involved or, if necessary, to the appropriate academic department head. All students are responsible for being familiar with the Academic Dishonesty Policy, which may be found in the Texas A&M University-San Antonio Student Handbook.</u>

Student Misconduct: Appropriate conduct is essential to the effective functioning of the University. University policy defines unacceptable conduct, both academic and non-academic misconduct, and penalties for such behavior in The Student Handbook and The Student Code of Conduct. University policy prescribes serious consequences for acts of academic misconduct

including, but not limited to, a grade of 'F' on the particular paper or assignment or a failing grade in the course. Also, a referral may be issued to the Office of Student Rights and Responsibilities where the sanctions can vary up to possible expulsion from the University. Considering the potential consequences of academic misconduct, it is obviously in students' best interests to avoid even the appearance of such behavior. If you are ever unclear whether a specific act might constitute academic misconduct, please contact your instructor for an assessment of the situation. All student term papers and other written assignments are subject to analysis by anti-plagiarism software.

Course Writing Policy: All assignments should be crafted originally and directly by students. In the meantime, all information/materials, created by others and then used in students' work, should be given credit to in the appropriate academic citation styles. Note that writing first in a language other than English and then having it translated into English through digital tools is prohibited.

AI Policy: Per University requirements, this course specifies the following rules regarding the use of generative AI tools, including but not limited to, GhatGPT, Google Gemini, Grok, Deepseek, etc. 1) Students should create original work for this course, and the use of AI can only be allowed when it serves as a *supplemental* tool for writing improvement, material/data locating, and other non-essential research processes. 2) AI-generated contents, as well as writings and sources created by others, should always be properly cited and acknowledged in your work; otherwise it is considered as plagiarism and violation of academic integrity. 3) If students do use AI tools in any process of their coursework, students must provide a detailed statement on how AI tools informed their research and writing process and the final product, including how you validated any AI-generated contents; this statement does not contribute to the word count of your assignments and does not automatically justify your use of AI tools. 4) The instructor reserves the right to request further information or reassign the assignment in the case of lack of transparency in the use of AI-generated contents in your work.

Submission Policy. Students need to follow the course instructions to submit all completed assignments, on time, to the correct places, online, in print, or in class, etc. Submissions late for the first hour will be penalized for 5% deduction in grade and for 20% deduction if late between the 2^{nd} hour and one day. Late assignments will NOT be accepted if submitted beyond 24 hours past the due time.

Grading. Students wishing a reconsideration of their grades may consult the professor, and requests must be made by email within <u>THREE</u> days of the posting of the grades. In the case of regrading, assignments will be graded afresh. Grades may go up or down. Students should immediately inform the professor of any discrepancies between grades recorded on the course website and the grades they have received on assignments.

Digital Device Policy or "No Screens" Policy. On-screen distractions in class have become a besetting problem, frustrating other students and faculty alike. This course thus simply

complies with the History Department's "no screens" policy: <u>laptops or cellphones are NOT allowed to use during the class and must be stowed in your bags.</u> Students will be notified in advance if laptops will be needed during a particular session for a group activity, or to consult readings they may not have printed out.

Communication Policy. In-Class Communication: The physical or virtual classroom in this course also serves as an intellectual space for open and free academic conversations between class participants, which consist of the instructor and registered students. Visitors and audit/outside students can be allowed only if the instructor grants approval in advance. Recording, and spread to outside outlets of, class conversations in any way is strictly prohibited unless there is written permission from the instructor. Email Communication: E-mail me directly any questions or concerns that you might have in relation to your coursework. Please do NOT use the "send message" function on the Blackboard platform. All correspondence between professors and students must occur via University email accounts. You must have a Jaguar email account ready and working. If it is not working, contact the help desk at sahelp@tamusa.edu or 210-784-4357

Etiquette. Please arrive on time. Please do not come and go during the class period. If you are unavoidably late, as a courtesy to the class, please enter quietly so as not to interfere with the concentration of other students.

Student Support and Resources

Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the Tools section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

The Writing, Language, and Digital Composing Center: The center provides writing assistance to graduate and undergraduate students in all three colleges at Texas A&M-San Antonio. Writing tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Students can make individual or group appointments with a writing tutor. Email writingcenter@tamusa.edu to make an appointment.

TAMUSA Library: Librarians from the Archives & Special Collections offer one on one research assistance by appointment for history students. Topics include brainstorming a topic, search techniques, or even citation help. Feel free to make an appointment with the librarian via the link: https://tamusa.libcal.com/appointments?u=30503

DH Resources

1. A List of major DH journals

- Digital Humanities Quarterly, Debates in the Digital Humanities, Review in Digital Humanities, Frontiers in Digital Humanities, Journal of Digital Humanities, International Journal of Digital Humanities
- For a more complete list, see
 https://zenodo.org/record/4164710#.Y3Gm10xBwea

2. DH-related Academic Programs and Research Centers

- o Harvard University Arts and Humanities Research Computing
- o <u>Digital Humanities at Oxford University</u>
- o Program in Digital Humanities at MIT
- o Stanford University Center for Spatial and Textual Analysis
- o <u>Princeton University Center for Digital Humanities</u>
- o <u>Duke Digital Humanities Initiative</u>
- o Digital Humanities Institute at the University of Sheffield
- o Digital Humanities Summer Institute at the University of Victoria

3. Conference Opportunities

- o The Alliance of Digital Humanities Organizations (ADHO), DH2024
- o International Conference on Interactive Digital Storytelling

For more resources, see Zeng, Z., Tao, J., & Zhu, L. (2022). Resources for Computational and Digital Humanities. Computational Humanities Lab @ Duke Kunshan University. https://ch.pubpub.org/pub/93hjfpy4

Class Schedule

Part I: Foundational Knowledge for Digital Humanities (Weeks 1-2)

Week 1 (August 26&28) Syllabus Review and Course Introduction

<u>Questions:</u> What is DH? What are the main concepts, theories, and arguments in the field? <u>Pre-Class Readings:</u>

- o Drucker, J. The Digital Humanities Coursebook: An Introduction to Digital Methods for Research and Scholarship (Routledge, 2021), chapter 1, "digital humanities overview."
- o Sayers, J. (Ed.). The Routledge Companion to Media Studies and Digital Humanities (Routledge, 2018), chapter 1, "theory/practice".

Optional: 1) How AI is helping historians better understand our past | MIT Technology Review; 2) Walsh, J. A et al. (2021). "Digital humanities in the iSchool." Journal of the Association for Information Science and Technology, 73(2), 188–203.

Week 2 (September 2&4): Data Literacy - Building a New Conceptual Framework for DH

<u>Questions:</u> How to approach DH as a discipline? What are the prevailing approaches and practices in the field of DH? How are those practices reflected in current DH projects?

Pre-Class Readings:

- o Schöch, Christof. "Big? Smart? Clean? Messy? Data in the Humanities." Journal of Digital Humanities 2 (2013, 3): 2–13.
- o Jenny Fry and Ralph Schroeder. "The Changing Disciplinary Landscapes of Research." In World Wide Research, edited by William Dutton and Paul W. Jeffreys, 257–71. The MIT Press.
- <u>In-Class Activity</u> **Digest a DH Project:** What are the project's research questions and goals? What are its methods, theories, values, and contexts? In what ways it contributes to the humanities (and/or other disciplines)? What kinds of support and resources does the project require? You may select a project from the above list of centers and programs.

Part II: Text and Image Analysis (Weeks 3-5)

Week 3 (September 9&11): Text as Data

<u>Questions:</u> How to prepare textual data sources? What are the frequently used techniques for text analysis? How to make effective inferences about a particular text? How to measure the characteristics of a text and its changes over time in the large corpora?

Pre-Class Readings:

- o Brandon M. Stewart, Justin Grimmer, and Margaret E. Roberts, Text as Data: A New Framework for Machine Learning and the Social Sciences (Princeton UP, 2022), 2.7 "Six Principles of Text Analysis," 22–32.
- o Sinclair, Stéfan, & Geoffrey Rockwell, "The Measured Words: How Computers Analyze Texts," in *Hermeneutica*, The MIT Press, 2016. 25-43.
- <u>In-Class Activity</u>: Identify a computerized corpus of text material from your field, develop an analytical strategy to process the document, and learn to analyze its structures and characteristics.

Sample Project: Mark Ravina, "An Introduction to Japanese Text Mining."

Optional: 1) Tong et al. "What Are People Talking about in #BlackLivesMatter and #StopAsianHate?" In Proceedings of the 2022 AAAI/ACM Conference on AI, Ethics, and Society, 723–38. AIES '22. New York: Association for Computing Machinery, 2022; 2) 2) The Living Machine: A Computational Approach to the Nineteenth-Century Language of Technology (jhu.edu)

Watch after class: Hilde De Weerdt, "Translation and Global Intellectual History."

Week 4 (September 16&18): Digital Archives

<u>Questions:</u> How to launch an archival digitization project? How to analyze digitized archives and what are the potential problems?

Pre-Class Readings:

- o The Digital Humanities Coursebook, chapter 3, "Digitization."
- o Gabriella Giannachi, "A Brief History of the Archive," Archive everything: mapping the everyday, The MIT Press, 2016
- o "Online Archives," the Business History Conference midyear meeting notes, 2022.

<u>Sample Project:</u> <u>The Chinese Text Project;</u> <u>Email Archive Project;</u> Optional: <u>The Chinese Factory Project</u>

Optional: <u>Digital History and the Politics of Digitization | Digital Scholarship in the Humanities | Oxford Academic (oup.com)</u>

Week 5 (September 23&25): Visual Analysis

<u>Questions:</u> What are the common types of visual materials? What are the strategies to process and analyze images? How to integrate different sources into the narrative of a DH project?

Pre-Class Readings:

- o Claire Warwick, Melissa Terras, and Julianne Nyhan, eds., Digital Humanities in Practice (Facet, 2012), chapter 4, "Image processing in the digital humanities."
- o "Visual Analysis" at Yale DHLab https://dhlab.yale.edu/visual-analysis/

<u>In-Class Activity:</u> We will work together to perform an <u>Historical Image Analysis</u> assignment.

Part III: Visualization (Weeks 6-8)

Week 6 (September 30& October 2): Infographics

<u>Questions:</u> How to incorporate information, data, or knowledge into a graph, chart, or plot? What are the different forms of graphic visual representations?

Pre-Class Readings and Video:

- o The Digital Humanities Coursebook, chapter 6, "information visualization."
- o Watch the video: "Tableau for beginners."

<u>In-Class Activity:</u> We learn to use datasets to create basic graphs on Tableau Public platform (Links to tutorial and datasets, additional resources for more advanced graphs)

Sample Project: Railroads and the Making of Modern America

Optional: Tools and Resources for Creating an Infographic

Week 7 (October 7&9): Spatial History and Geospatial Informatics

<u>Questions:</u> What information does geospatial informatics include? How to start and expand a spatial history project? How to integrate spatial information into historical narratives? What are the techniques to present geospatial information to professional and public audiences?

Pre-Class Readings:

- o The Routledge Companion to Media Studies and Digital Humanities, chapter 20, "Deep Mapping: Space, Place, and Narrative as Urban Interface."
- o The Digital Humanities Coursebook, chapter 8, "Mapping and GIS."

Sample Projects: Pitt World Historical Gazetteer; Harvard University China Historical GIS

<u>Watch the talk after class:</u> Ruth Mostern, "<u>Spatial and Environmental Methods and the Chinese</u>
<u>Past: A Yellow River Walkthrough."</u>

DH Review Paper: Due on Blackboard: Friday, October 10, 11:59:59 pm

Week 8 (October 14&16): Prep for Final Work

Students will start to prepare for their final DH work. In the Tuesday class meeting, students prepare a short idea note to share with the class. On Thursday, students will bring a page showing the list of resources and materials to be explored in order to finish the DH project.

Part IV: Digital Media and Storytelling (Weeks 9-10)

Week 9 (October 21&23): Digital Media as Form and Data

<u>Questions:</u> What are the opportunities and challenges social media has created for humanities researchers? How to engage social media audiences, topics, and trends? What are the techniques to exploit social media data?

Pre-Class Readings:

- o Digital Humanities in Practice, chapter 2, "Social media for digital humanities and community engagement."
- o Tanaka, Stefan. "Digital Media in History: Remediating Data and Narratives." *Perspectives on History* 47, no. 5 (May 1, 2009): 26–27.
- o Giacomin, Valeria, and Christina Lubinski. "Technical Note: Instagram for Educators." Greif Center for Entrep. Studies-USC Marshall, January 20, 2020.

<u>Optional:</u> Routledge Companion to Media Studies and Digital Humanities, chapter 8, "Interactive Narratives: Addressing Social and Political Trauma through New Media,"

Week 10 (October 28&30): Digital Storytelling

<u>Questions:</u> How to create a digital story for humanities inquiry? What are the differences with telling stories in conventional ways? What are the models of conveying a digital story?

Pre-Class Readings:

- o Camila Afanador-Llach and Maria Jose Afanador-Llach, <u>"Interface Design in Digital History: An Interdisciplinary Dialogue,"</u> 2022.
- o The Digital Humanities Coursebook, chapter 11, "Web presentations formats and networked resources."

<u>Sample Project:</u> Behind the Tower http://behindthetower.org/ (A Public History project developed by Prof. Joan Neuberger and UT graduate students to document the events of August 1, 1966.); Storymaps on ArcGIS, Mapping Cross-Cultural Encounters in Early Texas

Optional Readings:

 Cole Nussbaumer Knaflic, Storytelling with Data: A Data Visualization Guide for Business Professionals (Wiley, 2015).

Part V: Ethics, Collaboration, and Project Management (Weeks 11-12)

Week 11 (November 4&6): Develop, Manage, and Maintain a Digital Project

<u>Questions:</u> What are the procedures for effectively and efficiently managing a DH project? How to develop and maintain relations with interdisciplinary collaborators? This week focuses on project management and collaboration in DH research.

Pre-Class Readings:

- o The Digital Humanities Coursebook, chapter 12, "Project design and intellectual property."
- Project Management for the Digital Humanities: https://scholarblogs.emory.edu/pm4dh/
 Sample Projects: The China Biographical Database and Harvard University's "Digital China."
 Watch the talk after class: Hilde De Weerdt, "Designing a Digital History Project."

Week 12 (November 11&13): Ethics & Bias

<u>Questions:</u> What bias can computing and digitization create in humanities research? How to avoid bias? How to abide by ethics requirements and standards?

Pre-Class Readings:

- o Matthew J. Salganik, Bit by Bit: Social Research in the Digital Age (Princeton University Press, 2017), chapter 6, "Ethics."
- o Noble, Safiya Umoja. "A Society, Searching," in Algorithms of oppression: How Search Engines Reinforce Racism. NYU Press, 2018

Watch after class: Shalina Kantayya, Coded Bias, 7th Empire Media, 2020.

Week 13 (November 18&20): Final Project Workshop I

Students bring paper drafts and project demos to the class meeting. We will pair students into groups and conduct a peer review and feedback sessions. The instructor will discuss with students strategies to effectively finalize your work.

Week 14 (November 25&27): Final Project Workshop II

Week 15 (December 2&4): Final Project Showcases - Students will deliver brief presentations on their final works.

Final DH works due on Blackboard: Monday, December 8, 11:59:59 pm