ISLT 9439 – Digital Humanities and Information – 3 credit hours

University of Missouri-Columbia
School of Information Science & Learning Technologies
Fall 2024
Synchronous Class Meetings: Mondays on September 9, September 23, October 7, October 21, November 4, November 18, and December 2, from 5:30–6:30pm Central Time, via Zoom

Instructor: Dr. Wenyi Shang
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Office Hours: By appointment
Preferred Contact Method: By email

Course Description

This course on history, philosophy, and methods in the emerging field of 'digital humanities' focuses on topics at the nexus of information, the humanities disciplines, technology, and culture, as well as the contexts of the academy, libraries/archives, museums, and media. (3 credit hours)

Course Overview

This graduate course introduces the emerging field of digital humanities, with a particular focus on its relationship to information. The course is organized around weekly topics that explore the use and application of emerging technologies and methods in humanities scholarship. Topics include methods such as data visualization, spatial analysis, text encoding, network analysis, and machine learning, among others, as well as conceptual themes like debates and critiques within digital humanities, recent developments in AI, and the contributions of digital humanities to various fields. These fields include established humanities disciplines like literature and history, adjacent disciplines in the social sciences, and libraries.

The course adopts a comprehensive approach, combining synchronous and asynchronous sessions. Through engaging readings, discussions, lab assignments, and a semester project, students will gain a broad understanding of the field of digital humanities. They will also acquire hands-on experience with basic digital technologies and computational methods for data analysis, and develop skills in critically analyzing and reviewing research projects or in proposing and conducting their own. This course aims to prepare students to navigate the opportunities and challenges they will encounter in future roles in librarianship and other information professions, particularly in areas that engage or support activities related to digital humanities.

Objectives

LIS Student Learning Outcomes

This course meets the following LIS Student Learning Outcomes:

- Student Learning Outcome 2: Graduates will apply management principles and interdisciplinary best practices in library and information agency environments.

- Student Learning Outcome 3: Graduates will be competent in information organization and with understanding and evaluating information and communication technologies relevant to the information professions.

Class Learning Objectives and Assignments

Class Learning Objectives are aligned to the 2022 American Library Association Core Competences. Upon completion of this course, students will:

- Learn the history of humanities scholars using computational methods in their research and understand how emerging technologies contribute to humanities research. This aligns to ALA Core Competence 1D and 9C.
    - *Assignments:* Reading response and discussions
- Understand the ethical and cultural considerations of technologies in the digital humanities by engaging in scholarly debates surrounding digital humanities research. This aligns to ALA Core Competence 7B and 9B.
    - *Assignments:* Reading response and discussions
- Be able to use basic digital technologies and computational methods for data analysis and problem-solving in the context of humanities topics. This aligns to ALA Core Competence 1I and 9A.
    - *Assignments:* Lab assignments
- Develop skills in critically analyzing and reviewing research projects or in proposing and conducting their own research projects, as well as effectively communicating the findings of these activities. This aligns to ALA Core Competence 7C and 7D.
    - *Assignment:* Semester project
- Gain a deeper understanding of the interdisciplinary nature of library and information science and its potential integration in various areas, especially in the humanities. This aligns to ALA Core Competence 7A.
    - *Assignments:* Reading response and discussions; semester project

Course Expectations

What to Expect from an Online, Mixed-Mode Course

This course is structured into 15 weekly modules. There are seven synchronous class meetings, including three guest lectures and four lab sessions focused on programming, where the class meets virtually in real time. The other eight weekly modules are asynchronous. It is essential to access the course site on Canvas several times each week to stay updated with course announcements, access course materials, interact with peers in the Discussion Forum, submit assignments, etc.

What the Instructors and Your Peers Expect from You

By enrolling in this course, you agree to attend the seven synchronous class meetings and participate in the class discussion, and submit all assignments on time, including contributing to the weekly "reading response and discussions" assignment by commenting on your peers' responses. It is also expected that you have a foundational understanding of Internet terms and functions. All general class correspondence should be submitted to the relevant Discussion Forum; only personal or confidential matters should be directed to the instructor via email. This course does not assume programming experience or require prior knowledge of computational methods.

What You May Expect from the Instructor

The instructor will monitor and facilitate class discussions and help build a learning community. In the event of special circumstances (such as instructor travel or illness), announcements will be posted on Canvas in advance. Otherwise, email messages will be responded to within 24 to 48 hours, and assignment grades and feedback will be provided within a week of the deadline. If you would like to schedule a meeting with the instructor, appointments can usually be arranged within a week.

Bio of Instructor

Wenyi Shang is an assistant professor at the School of Information Science & Learning Technologies at the University of Missouri. He earned his Ph.D. in Information Sciences from the University of Illinois Urbana-Champaign, and his bachelor's degree in information management from Peking University, China.

His research uses computational methods to study the development of human society, contributing to the fields of digital humanities and computational social science. Methodologically, he has employed network analysis to investigate social structures and transformations in political culture in premodern Chinese societies. He has also used text mining to uncover new insights into literary history, revealing the valuable perspectives that literary texts offer concerning cultural changes in human society. Both methods often intersect with machine learning models. Additionally, his work involves exploring bibliographic metadata to examine the opportunities and challenges it presents. His articles on these subjects have been featured in peer-reviewed journals such as *Digital Humanities Quarterly*, *Digital Scholarship in the Humanities*, *Sociological Science*, *Cataloging & Classification Quarterly*, and *Journal of Historical Network Research*.

Required Readings and Materials

Weekly Reading Assignments:

Each week, four reading assignments will be shared on Canvas, two required and the other two optional. For specific readings assigned each week, please refer to the "Weekly Schedule" section.

Required Software/Technology:

Although this course does not assume programming experience or require prior knowledge of computational methods, it does require the installation of the Python programming language and Jupyter Notebook for editing and running Python code. Instructions for installing Python and Jupyter Notebook can be found at: https://docs.anaconda.com/anaconda/install.

Additional Materials:

In addition to the weekly reading assignments (consisting of articles or book chapters), the following three books are also recommended for further exploration:

For a comprehensive overview of digital humanities: Schreibman, S., Siemens, R., & Unsworth, J. (2016). *A New Companion to Digital Humanities*. John Wiley & Sons, Ltd. (Available online)

For the latest version of scholarly debates related to digital humanities: Gold, M. K., & Klein, L. F. (2023). *Debates in the Digital Humanities 2023*. University of Minnesota Press. (Available online)

For a notable example of adopting digital methods in humanities studies: Underwood, T. (2019). *Distant Horizons: Digital Evidence and Literary Change*. The University of Chicago Press. (Available at the university library)

Assignments and Methods of Assessment

Grade Assessment Distribution:

- Reading response and discussions: 40%
- Lab assignments: 20%
- Semester project: 40%

Reading Response and Discussions:

Each week, two required readings and two optional readings related to the week's topic will be assigned. You are expected to post a short response in the Discussion Forum on Canvas for both required readings (200–300 words). You can choose to respond to each reading separately or address both readings together, sharing aspects you found interesting and/or any questions you have. While you are welcome to share your thoughts on the optional readings, grading will be based exclusively on your response to the required readings. You are also expected to comment on at least two reading responses from your peers in the Discussion Forum. The original postings (responses to the reading assignments) are due each Friday, while the discussions (comments on your peers' responses) are due each Sunday.

There will be three guest lectures (synchronous class meetings) throughout the semester. On these occasions, you are encouraged to include reflections on the guest lecture in your reading response and discussions posted in the Discussion Forum (the original posting should still be 200–300 words, and you are still expected to comment on at least two reading responses from your peers). Although the reading response and discussions are still due on Friday and Sunday after the guest lecture as in other weeks, you are expected to read the reading assignments before the class meeting on Monday and be prepared to discuss them.

The grades for this component will be based on 15 weekly "reading response and discussions" assignments (including three weeks with guest lectures) and one "self-introduction and statement of interests" assignment. Each of the 16 assignments is worth 2.5% of the final grade.

Lab Assignments:

There will be four lab sessions (synchronous class meetings) throughout the semester. During each lab session, the instructor will share a Jupyter notebook and guide the class through the session's specific topic, providing additional tasks to be completed. You are expected to complete these tasks and submit the notebook as the lab assignment.

This course does not assume programming experience or require prior knowledge of computational methods. The goal of the lab assignments is not to teach programming comprehensively but to familiarize students with digital humanities practices through hands-on experience. Rather than building programs from scratch, you simply need to understand the basic idea of the Jupyter notebook during the lab session and make limited revisions to the code to solve questions slightly different from the examples provided, demonstrating your understanding. It is anticipated that most students with no programming experience will be able to finish each lab assignment within 1–2 hours.

The grades for this component will be based on four lab assignments, each assigned during a lab session. Each of the four assignments is worth 5% of the final grade.

Semester Project:

Each student is expected to complete an individual semester project for this course, and there are three options:

(1) Review essay: Write an essay that discusses a single existing digital humanities project. In assessing the project, you may describe its audience and use, its technical choices, its funding (if any), and its strategies for sustaining or preserving the results of research. To select a project for review, you may consider the awarded projects of the annual Digital Humanities Awards at http://dhawards.org (the winners for 2023 can be found by clicking "2023" and then "DH Awards 2023 – Results." For the years 2012 to 2022, go to the "ARCHIVE 2012-2022," select the specific year, and then click "Results"). Feel free to select other projects of interest as well. For guidance on writing a review for a digital humanities project, you may refer to the review essays in the *Reviews in Digital Humanities* journal at https://reviewsindh.pubpub.org.

(2) Comparative essay: Write an essay that discusses a methodological or theoretical problem in digital humanities. Instead of focusing on a single project as in option (1), use multiple (preferably 2–4) articles or projects as examples. Ensure that your discussion is firmly grounded in evidence drawn from these examples. To identify a problem to discuss, you may begin by reviewing our weekly topics and consider the specific questions addressed by the reading assignments.

(3) Original digital humanities project: This option is only recommended for students with substantial previous experience working with computational methods. If you choose this option, you will select a research topic related to the humanities and write a hypothesis-driven research article. Leveraging your previous knowledge on computational methods and knowledge gained from the course's weekly reading assignments, you will experience the entire lifecycle of a project, from planning the project and collecting data to analyzing and communicating your results.

The semester project proposal (due October 27) should outline your proposed focus for the final essay, describe the work you intend to undertake, and explain your goals in relation to the reading assignments and class topics. This proposal will serve as the blueprint for your work in the upcoming weeks. If you choose option (1) or (2), you should complete identifying the project(s) and/or article(s) to review or compare, as well as the aspects you plan to investigate. If you choose option (3), ensure that data collection is complete at this stage. If the necessary data is unavailable, consider switching to option (1) or (2). The project proposal should be 2–3 pages long (1.5 line spacing).

The semester project essay (due December 10) should be a complete essay with appropriate references, preferably using APA style. The essay should be 9–12 pages long (1.5 line spacing). If your essay includes many figures and tables in the main text, it can extend slightly beyond 12 pages, but should not exceed 15 pages.

Grades for this component will be based on both the proposal and the final essay, worth 10% and 30% of the final grade, respectively.

Late Submission Policy:

Late submission of assignments will not receive full credit unless the student has contacted the instructor and made arrangements prior to the due date (or, in the case of emergencies, as soon as possible).

Using of AI Writing Tools:

This course maintains a policy that you may use AI writing tools to assist you in the writing process but that all artificially generated text needs to be explicitly labeled. In submitting your semester project proposal and final essay, you need to disclose the extent to which you used ChatGPT or other AI writing tools in your work. All text written by AI must be quoted with the source of the model in parentheses (e.g., ChatGPT). At the end of your work, please include the following statement: "This work used (did not use) AI for the following components of the writing process: (choose none to three of the following: brainstorming, editing, sentence generation)."

Grading Scale

Letter Grade	Percentage	Grading Criteria
A	94-100%	The student has exceeded the basic requirements for the class and has demonstrated a complete understanding of the subject matter.
B	80-93%	The student has met the basic requirements for the class and has demonstrated an understanding of the subject matter.
C	70-79%	The student has not met the basic requirements for the class and has demonstrated an incomplete understanding of the subject matter.
F	69% or below	The student has not met the basic requirements for the class and does not demonstrate understanding of the subject matter.
The Grade of D is not awarded to graduate students.		

Weekly Schedule

Weekly Routine:

The weekly course cycle runs from Monday to Sunday. All students are expected to participate in course activities in the same weekly cycle. Each week will have a corresponding module on Canvas (titled "Week X"), where you will find the weekly reading assignments (two required and two optional, posted about a week in advance) and other relevant announcements or instructions. You are expected to read the required assignments and post your responses between Monday and Friday, and comment on your peers' responses between Monday and Sunday.

For three weeks (Weeks 6, 10, and 14), guest lectures will be held. During these weeks, you are expected to attend the synchronous class meeting via Zoom on Monday from 5:30–6:30pm. You should still post your responses to the reading assignments between Monday and Friday and comment on your peers' responses between Monday and Sunday. However, for these weeks, you are expected to complete the readings before the Monday evening class and be prepared to discuss them during the class meeting.

For four weeks (Weeks 4, 8, 12, and 15), lab sessions will be held. You are expected to attend the synchronous class meeting via Zoom on Monday from 5:30–6:30pm. In addition to the reading response and discussion assignments (original posts due by Friday, discussions by Sunday), you

will also need to complete a lab assignment based on the knowledge gained during the class meeting by Sunday.
Additionally, you are required to complete an individual semester project. Please plan your work in advance and avoid trying to complete everything within a week. You are welcome to contact the instructor to discuss your topic and plans for the semester project.

Week 1:

Dates: August 19–August 25
Topic: **Computational literary studies**
Weekly Objective: Computational literary studies is one of the most mature subfields of digital humanities. Students will gain an overview of the development of the field and understand both the importance and limitations of using computational methods in literary studies.
Required Readings:

- Moretti, F. (2000). The Slaughterhouse of Literature. *MLQ: Modern Language Quarterly*, *61*(1), 207–227. https://doi.org/10.1215/00267929-61-1-207
- Kirschenbaum, M. (2012). What Is Digital Humanities and What's It Doing in English Departments? In M. K. Gold (Ed.), *Debates in the Digital Humanities* (NED-New edition, pp. 3–11). University of Minnesota Press.

Optional Readings:

- Bode, K. (2017). The Equivalence of "Close" and "Distant" Reading; or, Toward a New Object for Data-Rich Literary History. *Modern Language Quarterly*, *78*(1), 77–106. https://doi.org/10.1215/00267929-3699787
- Liu, A. (2012). Where Is Cultural Criticism in the Digital Humanities? In M. K. Gold (Ed.), *Debates in the Digital Humanities* (NED-New edition, pp. 490–510). University of Minnesota Press.

Assignments:

- Self-introduction and statement of interests (due August 25)
- Reading response for Week 1 readings (original posting due August 23, discussions due August 25)

Week 2:

Dates: August 26–September 1
Topic: **Digital history**
Weekly Objective: Digital history is another significant subfield of digital humanities. Students will learn about the genealogy of it and understand how digital methods can change historical studies and why historians sometimes find these methods problematic.
Required Readings:

- Cohen, D. J., & Rosenzweig, R. (2005). Introduction: Promises and Perils of Digital History. In *Digital History: A Guide to Gathering, Preserving, and Presenting the Past on the Web* (pp. 1–17). University of Pennsylvania Press.
- Ruggles, S. (2021). The Revival of Quantification: Reflections on Old New Histories. *Social Science History*, *45*(1), 1–25. https://doi.org/10.1017/ssh.2020.44

Optional Readings:

- Robertson, S., & Mullen, L. A. (2021). Arguing with Digital History: Patterns of Historical Interpretation. *Journal of Social History*, *54*(4), 1005–1022. https://doi.org/10.1093/jsh/shab015
- Bol, P. K. (2020). Introduction to the Special Issue. *Journal of Chinese History*, *4*(2), 251–257. https://doi.org/10.1017/jch.2020.29

Assignments:

- Reading response for Week 2 readings (original posting due August 30, discussions due September 1)

Week 3:

Dates: September 2–September 8
Topic: **Computational models**
Weekly Objective: Students will learn the difference between statistical measurements and computational modeling. They will understand why, despite the inability of models to fully represent the complexity of the world, these models can still be useful tools for humanities studies.
Required Readings:

- So, R. J. (2017). All Models Are Wrong. *PMLA*, *132*(3), 668–673. https://doi.org/10.1632/pmla.2017.132.3.668
- Olsen, M. (1993). Signs, Symbols and Discourses: A New Direction for Computer-Aided Literature Studies. *Computers and the Humanities*, *27*(5–6), 309–314.

Optional Readings:

- Breiman, L. (2001). Statistical Modeling: The Two Cultures. *Statistical Science*, *16*(3), 199–231. https://doi.org/10.1214/ss/1009213726
- Peterson, A., & Spirling, A. (2018). Classification Accuracy as a Substantive Quantity of Interest: Measuring Polarization in Westminster Systems. *Political Analysis*, *26*(1), 120–128. https://doi.org/10.1017/pan.2017.39

Assignments:

- Reading response for Week 3 readings (original posting due September 6, discussions due September 8)

Week 4:

Dates: September 9–September 15
Topic: **Data visualization**
Weekly Objective: Data visualization is a widely used technique in digital humanities. Students will review current practices of various data visualization approaches in digital humanities projects and gain hands-on experience with basic data visualization in the lab session.
Activity: **Class meeting (lab session)** on Monday, September 9, from 5:30–6:30pm Central Time, via Zoom.
Required Readings:

- Jänicke, S., Franzini, G., Cheema, M. F., & Scheuermann, G. (2017). Visual Text Analysis in Digital Humanities. *Computer Graphics Forum*, *36*(6), 226–250. https://doi.org/10.1111/cgf.12873

- Ma, R., & Li, K. (2022). Digital Humanities as a Cross-Disciplinary Battleground: An Examination of Inscriptions in Journal Publications. *Journal of the Association for Information Science and Technology*, *73*(2), 172–187. https://doi.org/10.1002/asi.24534

Optional Readings:

- Klein, L. F., Foster, C., Hayward, A., Pramer, E., & Negi, S. (2017). The Shape of History: Elizabeth Palmer Peabody's Feminist Visualization Work. *Feminist Media Histories*, *3*(3), 149–153. https://doi.org/10.1525/fmh.2017.3.3.149
- Hoyt, E. (2014) Lenses for Lantern: Data Mining, Visualization, and Excavating Film History's Neglected Sources. *Film History*, *26*(2), 146–168. https://doi.org/10.2979/filmhistory.26.2.146

Assignments:

- Reading response for Week 4 readings (original posting due September 13, discussions due September 15)
- Lab assignment #1 "Data Visualization" (due September 15)

Week 5:

Dates: September 16–September 22

Topic: **TEI (Text Encoding Initiative)**

Weekly Objective: The Text Encoding Initiative (TEI) consortium develops and maintains the most important standard for representing humanistic texts in digital form. Students will understand the development and basic rules of this standard, as well as how it is applied in digital humanities projects.

Required Readings:

- Vanhoutte, E. (2004). An Introduction to the TEI and the TEI Consortium. *Literary and Linguistic Computing*, *19*(1), 9–16. https://doi.org/10.1093/llc/19.1.9
- Fukushima, K., Bourrier, K., & Parker, J. (2022). The Lives of Mistresses and Maids: Editing Victorian Correspondence with Genealogy, Prosopography, and the TEI. *Digital Humanities Quarterly*, *16*(1). https://www.digitalhumanities.org/dhq/vol/16/1/000595/000595.html

Optional Readings:

- Burnard, L., Mueller, M., Rahtz, S., Cummings, J., & Turska, M. (2017, January). An Introduction to TEI simplePrint. *TEI: Text Encoding Initiative*. https://tei-c.org/release/doc/tei-p5-exemplars/html/tei_simplePrint.doc.html
- Singer, K. (2013). Digital Close Reading: TEI for Teaching Poetic Vocabularies. *The Journal of Interactive Technology and Pedagogy*, (3). https://jitp.commons.gc.cuny.edu/digital-close-reading-tei-for-teaching-poetic-vocabularies

Assignments:

- Reading response for Week 5 readings (original posting due September 20, discussions due September 22)

Week 6:

Dates: September 23–September 29

Topic: **Digital humanities in the library**

Weekly Objective: Many digital humanities practitioners either work in or collaborate with libraries. Students will learn about the development and current practices of digital humanities in

libraries, preparing themselves for future roles in librarianship that engage in activities related to digital humanities.
Activity: **Class meeting (guest lecture by Glen Layne-Worthey, Associate Director, HathiTrust Research Center)** on Monday, September 23, from 5:30–6:30pm Central Time, via Zoom.
Required Readings:

- Layne-Worthey, G., & Galina Russell, I. (2024). Editors' Introduction. In I. Galina Russell & G. Layne-Worthey (Eds.), *The Routledge Companion to Libraries, Archives, and the Digital Humanities*. Routledge.
- Padilla, T., Allen, L.,Varner, S., Potvin, S., Roke, E. R., & Frost, H. (2016–2024). *Always Already Computational: Collections as Data*. https://collectionsasdata.github.io. Please read the following project documents (and optionally review other sections of the "Collections as Data" website):
  - Collections as Data: 50 Things You Can Do (2018). https://collectionsasdata.github.io/50things/50_things.pdf
  - Vancouver Statement on Collections as Data (2023). https://doi.org/10.5281/zenodo.8342171

Optional Readings:

- Nowviskie, B. (2013). Skunks in the Library: A Path to Production for Scholarly R&D. *Journal of Library Administration*, *53*(1), 53–66. https://doi.org/10.1080/01930826.2013.756698
- Koltay, T. (2016). Library and Information Science and the Digital Humanities: Perceived and Real Strengths and Weaknesses. *Journal of Documentation*, *72*(4), 781–792. https://doi.org/10.1108/JDOC-01-2016-0008

Assignments:

- Reading response for Week 6 readings (original posting due September 27, discussions due September 29)

Week 7:

Dates: September 30–October 6
Topic: **Topic modeling**
Weekly Objective: Topic modeling is a text analysis method for discovering topics that occur in a collection of documents. Students will understand how this method is applied to digital humanities research through both comprehensive overviews and specific case studies.
Required Readings:

- Blei, D. M. (2012). Topic Modeling and Digital Humanities. *Journal of Digital Humanities*, *2*(1), 8–11. https://journalofdigitalhumanities.org/2-1/topic-modeling-and-digital-humanities-by-david-m-blei
- Underwood, T. (2012, April 7). Topic Modeling Made Just Simple Enough. *The Stone and the Shell*. https://tedunderwood.com/2012/04/07/topic-modeling-made-just-simple-enough

Optional Readings:

- Goldstone, A., & Underwood, T. (2012). What Can Topic Models of *PMLA* Teach us About the History of Literary Scholarship? *Journal of Digital Humanities*, *2*(1), 39–48.

https://journalofdigitalhumanities.org/2-1/what-can-topic-models-of-pmla-teach-us-by-ted-underwood-and-andrew-goldstone

- Schofield, A., & Mimno, D. (2016). Comparing Apples to Apple: The Effects of Stemmers on Topic Models. *Transactions of the Association for Computational Linguistics*, *4*, 287–300. https://doi.org/10.1162/tacl_a_00099

Assignments:

- Reading response for Week 7 readings (original posting due October 4, discussions due October 6)

Week 8:

Dates: October 7–October 13
Topic: **Spatial analysis**
Weekly Objective: Recent developments in digital technologies have transformed the way humanities scholars use maps, leading many to adopt a "spatial turn" in their research. Students will explore spatial analysis in digital humanities through scholarly articles on the topic and gain hands-on experience during the lab session.
Activity: **Class meeting (lab session)** on Monday, October 7, from 5:30–6:30pm Central Time, via Zoom.
Required Readings:

- Blevins, C. Space, Nation, and the Triumph of Region: A View of the World from Houston. *Journal of American History*, *101*(1), 122–147. https://doi.org/10.1093/jahist/jau184
- Evans, E. F., & Wilkens, M. (2018). Nation, Ethnicity, and the Geography of British Fiction, 1880-1940. *Journal of Cultural Analytics*, *3*(2). https://doi.org/10.22148/16.024

Optional Readings:

- Southall, H., Mostern, R., & Berman, M. L. (2011). On Historical Gazetteers. *International Journal of Humanities and Arts Computing*, *5*(2), 127–145. https://doi.org/10.3366/ijhac.2011.0028
- Hewitt, R. (2011). Mapping and Romanticism. *The Wordsworth Circle*, *42*(2), 157–165. https://doi.org/10.1086/TWC24045852

Assignments:

- Reading response for Week 8 readings (original posting due October 11, discussions due October 13)
- Lab assignment #2 "Spatial Analysis" (due October 13)

Week 9:

Dates: October 14–October 20
Topic: **Critiques on digital humanities**
Weekly Objective: Digital humanities has faced significant critiques from humanities scholars. Students will gain an understanding on topics such as the limitations of computational methods in humanities research and issues related to racial and geographical representation within the field.
Required Readings:

- Da, N. Z. (2019). The Computational Case Against Computational Literary Studies. *Critical Inquiry*, *45*(3), 601–639. https://doi.org/10.1086/702594

- Putnam, L. (2016). The Transnational and the Text-Searchable: Digitized Sources and the Shadows They Cast. *The American Historical Review*, *121*(2), 377–402. https://doi.org/10.1093/ahr/121.2.377

Optional Readings:

- McPherson, T. (2012). Why Are the Digital Humanities So White? Or Thinking the Histories of Race and Computation. In M. K. Gold (Ed.), *Debates in the Digital Humanities* (pp. 139–160). University of Minnesota Press.
- Risam, R. (2019). Introduction: The Postcolonial Digital Cultural Record. In *New Digital Worlds: Postcolonial Digital Humanities in Theory, Praxis, and Pedagogy* (pp. 3–22). Northwestern University Press.

Assignments:

- Reading response for Week 9 readings (original posting due October 18, discussions due October 20)

Week 10:

Dates: October 21–October 27

Topic: **Can DH bridge the Two Cultures?**

Weekly Objective: Science and the humanities are referred to as the "Two Cultures." Students will explore the methodological problems and possibilities of interdisciplinary research and assess the role of digital humanities to mediate between the Two Cultures.

Activity: **Class meeting (guest lecture by Carsten Strathausen, Professor of German and English, University of Missouri)** on Monday, October 21, from 5:30–6:30pm Central Time, via Zoom.

Required Readings:

- Drucker, D. (2012). Humanistic Theory and Digital Scholarship. In M. K. Gold (Ed.), *Debates in the Digital Humanities* (NED-New edition, pp. 85–95). University of Minnesota Press.
- Strathausen, C. (2023) Repetition Without Replication: Notes Towards a Theory of Cultural Adaptation. In A. Du Crest, A. Ariew, M. Valkovic, P. Huneman & T. A.C. Reydon (Eds.), *Evolutionary Thinking Across the Disciplines: Problems and Perspectives in Generalized Darwinism* (pp. 61–75). Springer.

Optional Readings:

- Snow, C. P. (1959) *The Rede Lecture, 1959*. Cambridge University Press.
- Luhmann, J., & Burghardt, M. (2021). Digital Humanities—A Discipline in Its Own Right? An Analysis of the Role and Position of Digital Humanities in the Academic Landscape. *Journal of the Association for Information Science and Technology*, *73*(2), 1–24. https://doi.org/10.1002/asi.24533

Assignments:

- Reading response for Week 10 readings (original posting due October 25, discussions due October 27)
- Semester project proposal (due October 27)

Week 11:

Dates: October 28–November 3

Topic: **Prosopography**

Weekly Objective: Prosopography is the investigation of the common background characteristics of a group of actors in history. Students will learn this important method in historical research and its integration with digital humanities by reviewing key concepts, examining case studies, and exploring prosopography databases.
Required Readings:

- Stone, L. (1971). Prosopography. *Daedalus*, *100*(1), 46–79.
- Tackett, N. (2020). The Evolution of the Tang Political Elite and Its Marriage Network. *Journal of Chinese History*, *4*(2), 277–304. https://doi.org/10.1017/jch.2020.6

Optional Readings:

- Chen, S. & Wang, H. (2022). China Biographical Database (CBDB): A Relational Database for Prosopographical Research of Pre-Modern China. *Journal of Open Humanities Data*, *8*(1), 4. https://doi.org://10.5334/johd.68
- Momigliano, A. (1940). Reviews and Discussions. *The Journal of Roman Studies*, *30*(1), 75–80.

Assignments:

- Reading response for Week 11 readings (original posting due November 1, discussions due November 3)

Week 12:

Dates: November 4–November 10
Topic: **Network analysis**
Weekly Objective: Network analysis is a method widely used in the social sciences to systematically analyze social structures and is gaining increasing attention from humanities scholars. Students will review both literary and historical network analysis studies and gain hands-on experience during the lab session.
Activity: **Class meeting (lab session)** on Monday, November 4, from 5:30–6:30pm Central Time, via Zoom.
Required Readings:

- Algee-Hewitt, M. (2017). Distributed Character: Quantitative Models of the English Stage, 1550–1900. *New Literary History*, *48*(4), 751–782. https://doi.org/10.1353/nlh.2017.0038
- Shang, W., & Sang, Z. (2021). Solidity in a Turbulent Flow: The Social Network of Aristocratic Families in the Eastern Jin Dynasty (317–420 C.E.). *Journal of Historical Network Research*, *5*(1), 1–32. https://doi.org/10.25517/jhnr.v5i1.126

Optional Readings:

- Sims, M., & Bamman, D. (2020). Measuring Information Propagation in Literary Social Networks. In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)* (pp. 642–652). https://doi.org/10.18653/v1/2020.emnlp-main.47
- De Weerdt, H., Ho, B., Wagner, A., Jiyan, Q., & Mingkin, C. (2020). Is There a Faction in This List? *Journal of Chinese History*, *4*(2), 347–389. https://doi.org/10.1017/jch.2020.16

Assignments:

- Reading response for Week 12 readings (original posting due November 8, discussions due November 10)
- Lab assignment #3 “Network Analysis” (due November 10)

Week 13:

Dates: November 11–November 17
Topic: **Computational social science**
Weekly Objective: Computational social science is an adjacent field to digital humanities and adopts similar research methods. Students will gain a general overview of the field and understand its contributions to the social sciences, inspiring comparative perspectives for digital humanities.
Required Readings:

- Edelmann, A., Wolff, T., Montagne, D., & Bail, C. A. (2020). Computational Social Science and Sociology. *Annual Review of Sociology*, *46*, 61–81. https://doi.org/10.1146/annurev-soc-121919-054621
- McFarland, D. A., Lewis, K., & Goldberg, A. (2016). Sociology in the Era of Big Data: The Ascent of Forensic Social Science. *The American Sociologist*, *47*, 12–35. https://doi.org/10.1007/s12108-015-9291-8

Optional Readings:

- Lazer, D., Pentland, A., Adamic, L., Aral, S., Barabasi, A. L., Brewer, D., Nicholas Christakis, Contractor, N., Fowler, J., Gutmann, M., Jebara, T., King, G., Macy, M., Roy, D., & Van Alstyne, M. (2009). Computational Social Science. *Science*, *323*(5915), 721–723. https://doi.org/10.1126/science.1167742
- Braudel, F. (2009). History and the Social Sciences: The Longue Durée (I. Wallerstein, Trans.). *Review*, *32*(2), 171–203.

Assignments:

- Reading response for Week 13 readings (original posting due November 15, discussions due November 17)

Week 14:

Dates: November 18–November 24
Topic: **Artificial intelligence and culture**
Weekly Objective: Digital humanists are actively examining how the emerging technology of artificial intelligence can contribute to understanding human culture. Students will explore recent developments in this burgeoning field through the latest articles and gain insight into its potential future directions.
Activity: **Class meeting (guest lecture by Ted Underwood, Professor of Information Sciences and English, University of Illinois Urbana-Champaign)** on Monday, November 18, from 5:30–6:30pm Central Time, via Zoom.
Required Readings:

- Bamman, D., Chang, Kent K., Lucy, L., & Zhou, N. (2024). On Classification with Large Language Models in Cultural Analytics. https://arxiv.org/abs/2410.12029
- Sorensen, T., Moore, J., Fisher, J., Gordon, M., Mireshghallah, N., Rytting, C. M., Ye, A., Jiang, L., Lu, X., Dziri, N., Althoff, T., & Choi, Y. (2024). A Roadmap to Pluralistic Alignment. https://arxiv.org/abs/2402.05070

Optional Readings:

- Manning, C. (2022) Human Language Understanding and Reasoning. *Daedalus*, *151*(2), 127–138. https://doi.org/10.1162/daed_a_01905

- Gilkison, A., & Kurzynski, M. (2024) Vectors of Violence: Legitimation and Distribution of State Power in the *People's Liberation Army Daily* (*Jiefangjun Bao*), 1956-1989. *Journal of Cultural Analytics*, *9*(1). https://doi.org/10.22148/001c.115481

Assignments:

- Reading response for Week 14 readings (original posting due November 22, discussions due November 24)

Thanksgiving Break Week:

Dates: November 25–December 1

Week 15:

Dates: December 2–December 8
Topic: **Machine learning**
Weekly Objective: Machine learning is a foundational technique for many computational methods and is widely used in digital humanities. Without delving into the statistical details, students will learn the general concepts of machine learning and its relevance to humanities research. They will also gain hands-on experience with basic machine learning experiments during the lab session.
Activity: **Class meeting (lab session)** on Monday, December 2, from 5:30–6:30pm Central Time, via Zoom.
Required Readings:

- Long, H., & So, R. J. (2016). Turbulent Flow: A Computational Model of World Literature. *Modern Language Quarterly*, *77*(3), 345–367. https://doi.org/10.1215/00267929-3570656
- Ramsay, S. (2011). An Algorithmic Criticism. In *Reading Machines: Toward an Algorithmic Criticism* (pp. 1–17). University of Illinois Press.

Optional Readings:

- Jockers, M., & Kirilloff, G. (2017). Understanding Gender and Character Agency in the 19th Century Novel. *Journal of Cultural Analytics*, *2*(2). https://doi.org/10.22148/16.010
- Thompson, L., & Mimno, D. (2017). Computational Cut-Ups: The Influence of Dada. *The Journal of Modern Periodical Studies*, *8*(2), 179–195. https://doi.org/10.5325/jmodeperistud.8.2.0179

Assignments:

- Reading response for Week 15 readings (original posting due December 6, discussions due December 8)
- Lab assignment #4 "Machine Learning" (due December 8)
- Semester project essay (due December 10)

University Syllabus Statements

The most current versions of the Syllabus Statements of the University of Missouri can be found at: https://provost.missouri.edu/faculty-affairs/syllabus-information.

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