INF391D.10 Survey of Information Studies, Fall 2023

School of Information, UT-Austin Unique number: 28850

Class time: Wednesdays 12:00AM – 3:00PM

Instructor: Dr. Yan Zhang Office location: UTA5.416 Pronouns: she/her/hers Email: yanz@utexas.edu Class form: In person Class meetings: UTA1.204 Office hrs: By appointment

Course Description

An overview of the major ideas, concepts, and theories of Information Studies. Prerequisite: Admission to the doctoral program; consent of the graduate advisor.

Learning Objectives

- Appreciate Information Studies as an intellectual area and a social phenomenon; become familiar with a broad range of established and emerging areas of research in Information Studies.
- Understand the role of models, theories, and frameworks in scholarly research and in Information Studies in particular
- Understand the role and importance of well-defined research questions and objectives
- Develop broad familiarity with the broad range of research methods used in Information Studies
- Learn to read and analyze academic research articles, including those outside one's area of interest
- Demonstrate practical skills in investigating a new topic in Information Studies and managing the information resources acquired in that investigation
- Being able to write substantial literature reviews that summarize and synthesize published research in Information Studies

Course Structure

This is a doctoral seminar. As such class sessions will primarily consist of group discussions. These discussions will help us, as a group, to understand and analyze an article both for its empirical and theoretical content and as a piece of research.

Required Text

Booth, W. C., Colomb, G. G., Williams, J. M., Bizup, J., & FitzGerald, W. T. (2016). *The Craft of Research, Fourth Edition* (Fourth edition). University of Chicago Press. [Available online in UT library]

Machi, L. A., & McEvoy, B. T. (2016). *The Literature Review: Six Steps to Success* (Third edition). Corwin.

Other readings will be available as PDFs in Canvas.

University of Texas Honor Code

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

Statement on Academic Honesty

This course and your PhD study is about becoming an independent scholar. You must familiarize yourself with appropriate academic conduct and honesty by reading this guide: UT Austin Academic Integrity (https://deanofstudents.utexas.edu/conduct/academicintegrity.php)
Other UTexas Academic Honesty Resources:

- 1. Plagiarism and University procedures (https://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/#subchapter11400.prohibitedconduct/)
- 2. Copyright and plagiarism tutorials (https://gradschool.utexas.edu/academics/theses-and-dissertations/doctoral-candidacy/copyright-tutorial)

Assignments and Grading

Weekly Discussion Questions (30%); Due at 9:00PM each Tuesday

Analyzing two of the assigned research paper readings for each week by following the template below and *post two questions or discussion points to the discussion board on Canvas* for inclass discussion. Please note that you may but are not required to post your analyses.

- 1. Title of the article:
- 2. Theoretical framework (to understand the role of theories and models in research papers):
- 3. Research Qs:
- 4. I am studying [topic]:

because I want to find out [Conceptual question] in order to help my readers [conceptual significance] so that [potential practical applications]

5. In what way is this paper interesting, in the specific sense used by Davis (1971)? If it is not, why not?

Participation in Class Discussions (30%)

This is a seminar class so in-class participation is important.

Literature Review (30% (writing) *Due: Dec. 2nd*; 10% (presentation) *Due: Nov. 29*)

The ability to write a good literature review is critical for success in the doctoral program and for your future career as a scholar. Many course assignments, most conference and journal articles, and certainly your dissertation will require you to analyze, synthesize, and critique the current status of a body of literature. More importantly, conducting good literature reviews can help you have a solid understanding of a topic area, including what's been done before, which approaches

and methods have led to promising – or not so promising – paths of investigation, and where there are gaps in the literature that suggest useful areas for new research.

Writing a good literature review is much more than simply summarizing a handful of related papers. A useful literature review will convey an understanding of the breadth and depth of published work in a specific area, give the reader a good sense of the prominent theories, methods, systems, controversies, etc. that exist in the area – as well as the important authors and seminal publications – and show the reader where there are gaps in the literature that might suggest where more research is needed. Writing a literature review that meets these criteria is challenging and practice definitely helps. This assignment is intended to help you gain more experience with the process.

The deliverable for this assignment is a written literature review on a topic of your interest. The length and details of the submission may vary depending on the topic selected, but generally I expect the final product to be 1500-2000 words and discuss at least 15-20 references (some perhaps very briefly, others more thoroughly). You are free to use any established reference style (e.g., APA, MLA, Chicago) in this assignment. You are recommended to use a reference management tool (e.g., EndNote, Zotero, Mendeley) to help you organize the references.

The grade for your final deliverable of this assignment will be based on the following rubric:

Criteria	Observed qualities		
	Excellent (A/A-)	Good (B+)	Poor (B and below)
	Clear introduction to	Overall topic area less	No clear explanation of
Introduction to	topic area; effective	effectively described;	the topic area; no
topic area	orientation for body	limited orientation to	transition to body of
	of review provided	body of review	review
Body of review	Critical synthesis	Limited critical	No clear relationship
	present; consistent	analysis or attempt at	between reference
	and logical	synthesis; some	summaries; no critique
	transitions; cohesive	connections made	beyond summary
	narrative going from	between references,	descriptions
	general to specific	but lack of consistent	
		logical flow	
	Thorough, consistent	Adequate overall	Omission of references
	coverage of topic	coverage of topic area	clearly important to
Coverage	area; in-depth	but superficial	topic area; minimal
Coverage	discussion where	coverage of references	references; consistent
	appropriate		sketchy coverage of
			references
Conclusion	Solid, logical	Some conclusion or	No clear summary or
	summary of review;	overall synthesis	synthesis of topic area
	insights and	provided but not well	provided; summary
	suggestions follow	supported by body of	disconnected from
	from body of review	review	review
Clarity of writing	Clearly written,	Generally well-written	Significant spelling or
	coherent argument;	but flow of argument	grammar mistakes;

	structural variety; reads as a connected, informative narrative	not always easy to follow; lack of variety in structure from paragraph to paragraph	difficult to follow flow of narrative or arguments made
Citations/Referenc es	All references match citations; proper citation and reference style followed throughout	Correct citation and reference format used but occasional minor omissions or formatting problems	Inconsistencies between citations and references; incorrect citation or reference formatting

In fairness to students who turn in assignments on time, all late papers will be penalized by lowering the earned grade one grade level (e.g., from A- to B+; from B to B-) for each day that the assignment is late. No assignment submitted more than one week after the due date will be accepted. These penalties will not apply to students who know in advance that they will be submitting an assignment late, and let me know in advance. "In advance" means up until 24 hours before due date. I will use the following schema as the basis for calculating grades: A = 94-100, A = 90-93, B = 87-89, B = 84-86, B = 80-83, C = 77-79, C = 74-76, C = 70-73, D = 60-69, E = 80-80.

Course Schedule

Week 1 – August 23, 2023 Introduction and a brief touch on research

- 1. UT iSchool PhD Student Handbook (https://www.ischool.utexas.edu/handbooks/doctoral-program-handbook-current.pdf)
- 2. Discussing the use of Generative AI tools like ChatGPT in the class. You may read Center for Teaching and Learning's "5 Things to Know about ChatGPT" webpage: https://ctl.utexas.edu/5-things-know-about-chatgpt
- 3. Booth et al. Section I (Chapter 1-2) "Research, Researchers, and Readers"
- 4. Booth et al. Section III (Chapters 7-11) "Making an Argument"
- 5. Davis (1971) "That's interesting"

Week 2 – August 30, 2023 iSchool phenomenon

- 1. Olson, Gary, & Grudin, Jonathan (2009). TIMELINES The information school phenomenon. *Interactions*. https://dl.acm.org/doi/abs/10.1145/1487632.1487636
- 2. Dillon, A. (2012). What it Means to be an iSchool. *Journal of Education for Library and Information Science*, *53*(4), 267–273. JSTOR.
- 3. Wiggins, A., & Sawyer, S. (2012). Intellectual diversity and the faculty composition of iSchools. *Journal of the American Society for Information Science and Technology*, 63(1), 8–21. https://doi.org/10.1002/asi.21619
- 4. Machi & McEvoy, Introduction (Doing and producing literature review); Chapter 1 Step 1

Week 3 – Sep 6, 2023 Information Organization

- 1. Svenonius (2001) Information organization. Chapter 1 in book: The Intellectual Foundation of Information Organization, pp.1-15.
- 2. Star and Bowker (2007) Enacting Silence
- 3. Mai (2010) Classification in a social world
- 4. Feinberg, M. (2011). How information systems communicate as documents: the concept of authorial voice. Journal of Documentation, 67(6), 1015–1037.
- 5. Booth et al. Section II, Chapter 3-4 (Topics, Questions, and Problem)
- 6. Machi & McEvoy, Chapter 2 Step 2

Week 4 – Sep 13, 2023 Information Behavior

- 1. Dervin, B., & Nilan, M. (1986). Information needs and uses. Annual review of information science and technology, 21, 3–33.
- 2. Pettigrew, K. E., Fidel, R., & Bruce, H. (2001). Conceptual frameworks in information behavior. Annual review of information science and technology (ARIST), 35, 43–78. 3.
- 3. Bates, Marcia J. (1989). The Design of Browsing and Berrypicking Techniques for the Online Search Interface. Online Review 13(5): 407-424.
- 4. Poltrock, S. et al. (2003). Information seeking and sharing in design teams. Group'03 (pp. 239-247).
- 5. Booth et al. Section II, Chapter 5-6 (Sources and Engaging Sources)
- 6. Machi & McEvoy, Chapter 3 Step 3

Week 5 – Sep 20, 2023 Information Retrieval & Interactive Information Retrieval

- 1. Brin, S. & Page, L. (1998). The anatomy of a large-scale hypertextual Web search engine.
- 2. Horowitz, D., & Kamvar, S. D. (2010). The anatomy of a large--scale social search engine. Proceedings of the 19th international conference on World Wide Web, WWW '10 (pp. 431–440). New York, NY, USA: ACM.
- 3. Voorhees, E. M. (2007). TREC: Continuing information retrieval's tradition of experimentation. Commun. ACM, 50(11), 51–54.
- 4. SWIRL 2018 Report (Culpepper)
- 5. Ruthven (2008) Interactive Information Retrieval, ARIST, p. 43-91
- 6. Machi & McEvoy, Chapter 4 Step 4

Week 6 – Sep 27, 2023 Information Institutions/Scholarly Communication

- 1. Moravcsik, M. J., & Murugesan, P. (1975). Some Results on the Function and Quality of Citations. Social Studies of Science, 5(1), 86–92.
- 2. Delfanti, A. (2016). Beams of particles and papers: How digital preprint archives shape authorship and credit. Social Studies of Science, 46(4), 629–645. https://doi.org/10.1177/0306312716659373

- 3. Sugimoto, C. R., Work, S., Larivière, V., & Haustein, S. (2017). Scholarly use of social media and altmetrics: A review of the literature. Journal of the Association for Information Science and Technology, 68(9), 2037–2062. https://doi.org/10.1002/asi.23833
- 4. LeMaistre, T., Embry, R. L., Zandt, L. V., & Bailey, D. E. (2012). Role Reinvention, Structural Defense, or Resigned Surrender: Institutional Approaches to Technological Change and Reference Librarianship. The Library Quarterly, 82(3), 241–275.
- 5. Booth et al. Section IV, Chapter 16 (Introductions and Conclusions)
- 6. Machi & McEvoy, Chapter 5 Step 5

Week 7 – Oct 4, 2023 Socio-Technical Systems/Social Informatics

- 1. Trist, Eric (1981). The historical background. In The evolution of socio-technical systems: A conceptual framework and an action research program, pp. 1-26.
- 2. Sawyer and Rosenbaum (2000). Social Informatics in the Information Sciences: Current Activities and Emerging Directions. Informing Science 3 (2).
- 3. Howison, J., & Crowston, K. (2014). Collaboration through open superposition. MIS Quarterly, 38(1), 29-50.
- 4. Sawyer, S., & Jarrahi, M. (2014). Sociotechnical Approaches to the Study of Information Systems. In H. Topi & A. Tucker (Eds.), *Computing Handbook, Third Edition* (Vol. 19, pp. 5–1 5–27). Chapman and Hall/CRC.
- 5. Machi & McEvoy, Chapter 6 Step 6

Week 8 – Oct 11, 2023 Information Systems

- 1. Ellis, D., Allen, D., & Wilson, T. (1999). Information Science and Information Systems: Conjunct subjects disjunct disciplines. Journal of the American Society for Information Science, 50(12), 1095–1108.
- 2. Orlikowski, W. J., & Iacono, C. S. (2001). Research Commentary: Desperately Seeking the "IT" in IT Research: A call to theorizing the IT Artifact. Information Systems Research, 12(2), 145.
- 3. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS quarterly, 319–340.
- 4. Jarvenpaa, S. L., & Leidner, D. E. (1999). Communication and Trust in Global Virtual Teams. Organization Science, 10(6), 791–815.

Week 9 – Oct 18, 2023 Human Computer Interaction

- 1. Carroll, J.M. (1997). Human-computer interaction: Psychology as a science of design. Annual Review of Psychology, 48, 61-83.
- 2. Civan-Hartzler, A., McDonald, D.W., Powell, C., Skeels, M.M., Mukai, M., & Pratt, W. (2010). Bringing the field into focus: User-centered design of a patient expertise locator. In the Proceedings of CHI 2010, 1675-1684.
- 3. Epstein, Ping, Fogarty, and Munson (2015). A lived informatics model of personal informatics. Proceedings of the UbiComp'15 conference (pp. 731-742).

4. Morris, M. R., Fourney, A., Ali, A., & Vonessen, L. (2018). Understanding the Needs of Searchers with Dyslexia. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–12. https://doi.org/10.1145/3173574.3173609

Booth et al. Section IV, Chapter 12-14 (Planning, Drafting, and Revising)

Week 10 – Oct 25, 2023 CSCW-Computer Supported Cooperative Work

- 1. Grudin, J. (1988). Why CSCW applications fail. Proceedings of CSCW 1988.
- 2. Ackerman, Mark S. "The intellectual challenge of CSCW: The gap between social requirements and technical feasibility." Human–Computer Interaction 15.2-3 (2000): 179-203.
- 3. Hollan, J., & Stornetta, S. (1992). Beyond being there. Proceedings of ACM SIGCHI.
- 4. Cataldo, M., & Herbsleb, J. D. (2008). Communication networks in geographically distributed software development. In CSCW '08: Proceedings of the ACM 2008 conference on Computer supported cooperative work (p. 579–588).
- 5. Booth et al. Section IV, Chapter 15 (Communicating Evidence Visually), Chapter 17 (Revising Style).

Week 11 – Nov 1, 2023 Attending a conference

Week 12 – Nov 8, 2023 Digital Humanities

- 1. Svensson, Patrik (2010) "The Landscape of Digital Humanities" DH Quarterly. 4.1 [open access: search the title of the article in Google and the fulltext is available online]
- 2. Svensson, Patrik (2012) "Envisioning the Digital Humanities" DH Quarterly. 6.1 [open access]
- 3. Chen, A. T., & Cole, C. L. (2021). Reflexivity in issues of scale and representation in a digital humanities project. VIS4DH. (7 pages).
- 4. Ciccoricco (2012) The Materialities of Close Reading: 1942, 1959, 2009. DH Quarterly 6.1 [open access]

Week 13 - Nov 15, 2023 Archive

- 1. Cook, T. (2013). Evidence, memory, identity, and community: four shifting archival paradigms. Archival Science, 13(2-3), 95–120. doi:10.1007/s10502-012-9180-7
- 2. McKemmish, S. (2001). Placing records continuum theory and practice. Archival Science, 1(4), 333–359.
- 3. Thibodeau, K. (2016). Breaking Down the Invisible Wall to Enrich Archival Science and Practice. Paper presented at the IEEE Big Data 2016: 1st CAS workshop. December 8, 2016. [paper and slides]
- 4. Patricia Galloway (2010) Digital Archiving. In Marcia Bates and Mary Niles Maack (eds.), Encyclopedia of Library and Information Science, 1518-1527.

Week 14 – Nov 22, 2023	** Thanksgiving, no class **
Week 15 – Nov 29, 2023	Final presentation

Sharing of Course Materials is Prohibited

No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class without explicit, written permission of the instructor. Unauthorized sharing of materials promotes cheating. It is a violation of the University's Student Honor Code and an act of academic dishonesty. The University is well aware of the sites used for sharing materials, and any materials found on such sites that are associated with a specific student, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in sanctions, including failure of the course.

Religious Holy Days

By <u>UT Austin policy</u>, you must notify me of your pending absence as far in advance as possible to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Personal Pronoun Preference

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name, unless they have added a "preferred name" with the Gender and Sexuality Center, which you can do so here: http://diversity.utexas.edu/genderandsexuality/publications-and-resources/. I will gladly honor your request to address you by a name that is different from what appears on the official roster, and by the gender pronouns you use (she/he/they/ze, etc). Please advise me of any changes early in the semester so that I may make appropriate updates to my records. For instructions on how to add your pronouns to Canvas, visit https://utexas.instructure.com/courses/633028/pages/profile-pronouns.

Student Rights & Responsibilities

- You have a right to a learning environment that supports mental and physical wellness.
- You have a right to respect.
- You have a right to be assessed and graded fairly.
- You have a right to freedom of opinion and expression.
- You have a right to privacy and confidentiality.

- You have a right to meaningful and equal participation, to self-organize groups to improve your learning environment.
- You have a right to learn in an environment that is welcoming to all people. No student shall be isolated, excluded or diminished in any way.

With these rights come responsibilities:

- You are responsible for taking care of yourself, managing your time, and communicating with the teaching team and with others if things start to feel out of control or overwhelming.
- You are responsible for acting in a way that is worthy of respect and always respectful of others.
- Your experience with this course is directly related to the quality of the energy that you bring to it, and your energy shapes the quality of your peers' experiences.
- You are responsible for creating an inclusive environment and for speaking up when someone is excluded.
- You are responsible for holding yourself accountable to these standards, holding each other to these standards, and holding the teaching team accountable as well.

University Resources for Students

Canvas Resources

You can access the University Resources for Students Canvas site at: https://utexas.instructure.com/enroll/TP964H. The site provides a list of resources that are important for students as they engage with and navigate your course and the university.

Personal or Family Emergencies

If you experience a personal or family emergency (death in the family, protracted sickness, serious mental health issues) you should contact Student Emergency Services in the Office of the Dean of Students. As advocates, SES supports students by providing the most comprehensive outreach, assistance, intervention, and referrals. They will also work with you to communicate with me and your other professors and let them know of your situation.

Services for Students with Disabilities

The university is committed to creating an accessible and inclusive learning environment consistent with university policy and federal and state law. Please let me know if you experience any barriers to learning so I can work with you to ensure you have equal opportunity to participate fully in this course. If you are a student with a disability, or think you may have a disability, and need accommodations please contact Services for Students with Disabilities (SSD). Please refer to SSD's website for contact and more information: http://diversity.utexas.edu/disability/. If you are already registered with SSD, please deliver your Accommodation Letter to me as early as possible in the semester so we can discuss your approved accommodations and needs in this course.

Counseling and Mental Health Center

The <u>Counseling and Mental Health Center</u> serves UT's diverse campus community by providing high quality, innovative and culturally informed mental health programs and services that enhance and support students' well-being, academic and life goals. To learn more about your counseling and mental health options, call CMHC at (512) 471-3515. If you are experiencing a mental health crisis, call the CMHC Crisis Line 24/7 at (512) 471-2255.

The University Writing Center

The UWC provides free programs to support and empower all UT graduate students. UWC consultants provide one-on-one feedback on any project at any stage of your writing process. For group accountability and instruction, check out UWC monthly writing groups, workshops, and retreats.

The Sanger Learning Center

Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center's classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit <u>Sanger Learning Center</u> or call 512-471-3614 (JES A332).

Student Emergency Services

UT's <u>Student Emergency Services</u> provides assistance, intervention, and referrals to support students navigating challenging or unexpected issues that impact their well-being and academic success. If you need to be absent from class due to a family emergency, medical or mental health concern, or academic difficulty due to crisis or an emergency situation, please register with <u>Student Emergency Services</u>. SES will verify your situation and notify your professors.

Land Acknowledgment

We would like to acknowledge that we are meeting on Indigenous land. Moreover, we would like to acknowledge and pay our respects to the Carrizo & Comecrudo, Coahuiltecan, Caddo, Tonkawa, Comanche, Lipan Apache, Alabama-Coushatta, Kickapoo, Tigua Pueblo, and all the American Indian and Indigenous Peoples and communities who have been or have become a part of these lands and territories in Texas, here on Turtle Island.

Title IX Reporting

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:

- 1. Intervene to prevent harmful behavior from continuing or escalating.
- 2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
- 3. Investigate and discipline violations of the university's relevant policies.

Faculty members and certain staff members are considered "Responsible Employees" or "Mandatory Reporters," which means that they are required to report violations of Title IX to the Title IX Coordinator. I am a Responsible Employee and must report any Title IX-related incidents that are disclosed in writing, discussion, or one-on-one. Before talking with me or with any faculty or staff member about a Title IX-related incident, be sure to ask whether they are a responsible employee. If you want to speak with someone for support or remedies without making an official

report to the university, email <u>advocate@austin.utexas.edu</u> For more information about reporting options and resources, visit the <u>Title IX Office</u> or email <u>titleix@austin.utexas.edu</u>.

Campus Safety

The following are recommendations regarding emergency evacuation from the <u>Office of Campus Safety and Security</u>, 512-471-5767,

- Occupants of buildings on The University of Texas at Austin campus must evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not reenter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- For more information, please visit <u>emergency preparedness</u>.