

LIS 598 Technology, Information, and Society

Course Schedule

Winter 2020

Week 1 - Share your introduction by Jan 10 9pm

Introduction to technology, information, and society

- Review all important course documents and assignment instructions, and become familiar with our eClass site!
- Readings this week:
 - Abras, C., Maloney-Krichmar, D., & Preece, J. (2004). User-centered design. In W. Bainbridge (Ed.), *Berkshire encyclopedia of human-computer interaction*. Thousand Oaks, CA: Sage. [[Preprint PDF available online](#)]
 - Kling, R. (2007). What is social informatics and why does it matter? *The Information Society*, 23(4), 205-220. <https://doi.org/10.1080/01972240701441556> [Originally published 1999 in *D-Lib Magazine*]
- Class activities this week:
 - Course introduction: Watch the posted video
 - Share and Discuss: Introductions: *Post a short introduction of yourself to your classmates and to me*. Check the [Discussion Topics](#) document for more details this week and on your Discussions and Share and Discuss activities throughout the term.

UNIT 1: Human Perspectives

Week 2 - Discussion 1 initial post due Jan 14, participate through Jan 16 9pm

Human-centred design and usability

- Readings this week:
 - Matera, M., Rizzo, F., & Carughi, G. T. (2006). Web usability: Principles and evaluation methods. In E. Mendes & N. Mosley (Eds.), *Web engineering* (Chapter 5, pp. 143-180). Berlin, Germany: Springer. https://doi.org/10.1007/3-540-28218-1_5
 - Hanrath, S., & Kottman, M. (2015). Use and usability of a discovery tool in an academic library. *Journal of Web Librarianship*, 9(1), 1-21. <https://doi.org/10.1080/19322909.2014.983259>
- Class activities this week:
 - Discussion 1: The Importance of Human Users: *Why should we consider humans when we design, implement, adopt, and use LIS technologies? Which design and usability factors do you think are most significant to this consideration? What might we miss if we do not consider these factors?*

Week 3 - Share and Discuss Jan 20-23 9pm

Human-computer interaction (HCI) and cognition

- Readings this week:
 - Makri, S., Blandford, A., Gow, J., Rimmer, J., Warwick, C., & Buchanan, G. (2007). A library or just another information resource? A case study of users' mental models of traditional and digital libraries. *Journal of the American Society for Information Science and Technology*, 58(3), 433–445. <https://doi.org/10.1002/asi.20510>
 - Rogers, Y. (2004). New theoretical approaches for human-computer interaction. *Annual Review of Information Science and Technology*, 38, 87–143. <https://doi.org/10.1002/aris.1440380103>
- Class activities this week:
 - Share and Discuss: Theories of Human Cognition: *Consider a particular model, theory, or approach to human cognition and mental processes that you read about this week or know of from your prior experiences and knowledge. Briefly explain your understanding of this model, theory, or approach and how you could apply it when designing, implementing, adopting, or using LIS technologies. (Feel free to pick a particular technology as an example.) Where does this model, theory, or approach provide us with significant insight? Where might it (or your understanding of it) not be as useful or appropriate?*

Week 4 - Discussion 2 initial post due Jan 28, participate through Jan 30 9pm

Human-centred computing (HCC)

- Readings this week:
 - Jaimes, A., Gatica-Perez, D., Sebe, N., & Huang, T. S. (2007). Human-centered computing: Toward a human revolution. *Computer*, 40(5), 30-34. <https://doi.org/10.1109/MC.2007.169>
 - Bannon, L. (2011, July/August). Reimagining HCI: Toward a more human-centered perspective. *Interactions*, 18(4), 50-57. <https://doi.org/10.1145/1978822.1978833>
 - Rinkus, S., Walji, M., Johnson-Throop, K. A., Malin, J. T., Turley, J. P., Smith, J. W., & Zhang, J. (2005). Human-centered design of a distributed knowledge management system. *Journal of Biomedical Informatics*, 38(1), 4–17. <https://doi.org/10.1016/j.jbi.2004.11.014>
- Class activities this week:
 - Discussion 2: Human-Centred Perspectives: *Consider the factors and elements raised by the human-centred computing perspective. How do they differ from a focus on usability or cognition? How is this perspective similar to other human perspectives? In your discussion, look forward to Report #1 and how these might shape the design, implementation, adoption, and/or use of LIS technologies. What common lessons might we draw, no matter the human perspective or LIS technology?*

UNIT 2: Social Perspectives

Week 5 - Share and Discuss Feb 3-6 9pm

Social informatics

- Reports on human perspectives on LIS technology due Feb 7 9pm
- Readings this week:
 - Meyer, E. T. (2014). Examining the hyphen: The value of social informatics for research and teaching. In P. Fichman & H. Rosenbaum (Eds.), *Social informatics: Past, present, and future* (Chapter 3, pp. 56-72). Newcastle, UK: Cambridge Scholars Publishing. [[PDF preprint available online](#)]
 - Kling, R., Rosenbaum, H., & Sawyer, S. (2005). Social informatics for designers, developers, and implementers of ICT-based systems. In *Understanding and communicating social informatics: A framework for studying and teaching the human contexts of information and communication technologies* (Chapter 3, pp. 33-50). Medford, NJ: Information Today. [PDF available via eClass]
- Class activities this week:
 - Share and Discuss: Many Humans, Many Technologies: *How does the perspective offered by social informatics differ from that of the human perspectives we covered earlier this term? What factors are novel? How would our view of the world and of humans be different under a social informatics perspective? How might our view of LIS technologies be different?*

Week 6 - Discussion 3 initial posts due Feb 11, participate through Feb 13 9pm

Sociotechnical infrastructure

- Readings this week:
 - Sawyer, S., & Jarrahi, M. H. (2014). Sociotechnical approaches to the study of information systems. In H. Topi & A. Tucker (Eds.), *Computing handbook: Information systems and information technology* (3rd ed., pp. 5-1 - 5-27). Boca Raton, FL: CRC Press. <https://doi.org/10.1201/b16768>
 - Star, S. L., & Ruhleder, K. (1996). Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information Systems Research*, 7(1), 111–134. <https://doi.org/10.1287/isre.7.1.111>
 - Shilton, K., Koepfler, J. A., & Fleischmann, K. R. (2013). Charting sociotechnical dimensions of values for design research. *The Information Society*, 29(5), 259-271. <https://doi.org/10.1080/01972243.2013.825357>
- Class activities this week:
 - Discussion 3: Social, Technical, Both? *A sociotechnical viewpoint looks to combine social and technical views on technology in harmony. However, the relative emphasis placed on each may be somewhat different for different research studies, technology projects, and LIS and IT professionals, or when we*

apply other social perspectives on technology. What advantages and limitations are there to an emphasis on the social or the technical side of the divide? Be sure to address both sides. How can we best balance the two when considering the design, implementation, adoption, and use of LIS technologies?

Week 7 - **NO CLASS** - Winter Term Reading Week

Week 8 - Discussion 4 initial posts due Feb 25, participate through Feb 27 9pm

Organizational and community informatics

- Readings this week:
 - Orlikowski, W. J., & Robey, D. (1991). Information technology and the structuring of organizations. *Information Systems Research*, 2(2), 143–169.
<https://doi.org/10.1287/isre.2.2.143>
 - Williams, K., & Durrance, J. C. (2008). Social networks and social capital: Rethinking theory in community informatics. *The Journal of Community Informatics*, 4(3). Retrieved from <http://www.ci-journal.net/index.php/ciej/article/view/465>
 - Kling, R., McKim, G., & King, A. (2003). A bit more to IT: Scholarly communication forums as Socio-Technical Interaction Networks. *Journal of the American Society for Information Science and Technology*, 54(1), 47-67.
<https://doi.org/10.1002/asi.10154>
- Class activities this week:
 - Discussion 4: Social and Informational Ties: *Most social perspectives consider the concept of the “tie” between individuals, communities, and/or resources; however, organizational and community informatics place particular emphasis on it and the concept of the “network” that results. Considering libraries and information organizations and the communities that use them, why are the ties and networks important when considering the design, implementation, adoption, and use of LIS technologies? What does such a focus add to our understanding of LIS and technology? What does it perhaps take away that other perspectives consider?*
 - Choose group members for the LIS Technology Case Study group project by Feb 28 9pm. Use the [sign-up sheet](#) to list your names and chosen technology.

UNIT 3: Critical Perspectives

Week 9 - Share and Discuss Mar 2-5 9pm

Policy and governance

- Reports on social perspectives on LIS technology due Mar 6 9pm
- Readings this week:
 - Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, 27(3), 264–271. <https://doi.org/10.1016/j.giq.2010.03.001>
 - Zhu, X. (2016). Driven adaptation: A grounded theory study of licensing electronic resources. *Library and Information Science Research*, 38(1), 69–80. <https://doi.org/10.1016/j.lisr.2016.02.002>
- Class activities this week:
 - Share and Discuss: Intellectual Freedom, Technology, and Governance: *Intellectual freedom is a core value of LIS, and most libraries and information organizations naturally function within a governance structure of some kind. Consider these and how they may influence views we can take on LIS technologies. Does a critical perspective informed by intellectual freedom and governance require us to consider factors in the design, implementation, adoption, and use of LIS technologies that human or social perspectives might miss? If so, what are these factors and why are they important? Or if not, how are these factors already included in previously covered perspectives?*

Week 10 - Discussion 5 initial posts due Mar 10, participate through Mar 12 9pm

Social justice

- Readings this week:
 - Koepfler, J. A., Mascaro, C., & Jaeger, P. T. (2014). Homelessness, wirelessness, and (in)visibility: Critical reflections on the Homeless Hotspots Project and the ensuing online discourse. *First Monday*, 19(3). <https://doi.org/10.5210/fm.v19i3.4846>
 - Eubanks, V. (2011). Popular technology. In *Digital dead end: Fighting for social justice in the information age* (Chapter 6, pp. 99-127). Cambridge, MA: MIT Press. [[Available as an ebook from the U of A Library](#)]
 - Fleischmann, K. R. (2011). The public library in the life of the Internet: How the core values of librarianship can shape human-centered computing. In J. C. Bertot, P. Jaeger, & C. R. McClure (Eds.), *Public libraries and the Internet: Roles, perspectives, and implications* (Chapter 6, pp. 91-102). Santa Barbara, CA: Libraries Unlimited. [PDF available via eClass]
- Class activities this week:
 - Discussion 5: Technology for Social Justice: *Can technology be used for both good and ill? How does a critical perspective guided by social justice shape our*

roles, as librarians and information professionals, with regards to LIS technologies? What specific factors do you feel are most important when critically considering the design, implementation, adoption, and use of technology for social justice and social good? Do other perspectives consider these?

Week 11 - Discussion 6 initial posts due Mar 17, participate through Mar 19 9pm

Gender and identity

- Readings this week:
 - Wajcman, J. (2010). Feminist theories of technology. *Cambridge Journal of Economics*, 34(1), 143-152. <https://doi.org/10.1093/cje/ben057>
 - Duguay, S. (2016). "He has a way gayer Facebook than I do": Investigating sexual identity disclosure and context collapse on a social networking site. *New Media and Society*, 18(6), 891-907. <https://doi.org/10.1177/1461444814549930>
 - One or both of the following:
 - Hankerson, D., Marshall, A. R., Booker, J., El Mimouni, H., Walker, I., & Rode, J. A. (2016). Does technology have race? In J. Kaye & A. Druin (Chairs), *Proceedings of the 2016 CHI conference on human factors in computing systems (CHI 2016)* (pp. 473-486), San Jose, CA, May 7-12, 2016. New York, NY: ACM. <https://doi.org/10.1145/2851581.2892578>
 - Fiesler, C., Morrison, S., & Bruckman, A. S. (2016). An archive of their own: A case study of feminist HCI and values in design. In J. Kaye & A. Druin (Chairs), *Proceedings of the 2016 CHI conference on human factors in computing systems (CHI 2016)* (pp. 2574-2585), San Jose, CA, May 7-12, 2016. New York, NY: ACM. <https://doi.org/10.1145/2858036.2858409>
- Class activities this week:
 - Discussion 6: "You're Unique, Just Like Everyone Else": *The aphorism in the title is commonly but possibly mis-attributed to Margaret Mead, and speaks to our existence as unique individuals but also our common human, social, and critical condition and contexts. This week's readings focus on our identities, how we see ourselves, and how we are seen as critical factors in the design, implementation, adoption, and use of technology. Why are these important factors for us to consider? What do our common uniquenesses and differences mean for our critical consideration of LIS technologies? For the importance of others' perspectives, views, and values in the context of LIS technologies?*

UNIT 4: Emerging Perspectives

Week 12 - Share and Discuss Mar 23-26 9pm

Archives, museums, repositories

- Reports on critical perspectives on LIS technology due Mar 27 9pm
- Readings this week:
 - Purdy, J. P. (2011). Three gifts of digital archives. *The Journal of Literacy and Technology*, 12(3), 24-49. Retrieved from http://www.literacyandtechnology.org/uploads/1/3/6/8/136889/jlt_v12_3_purdy.pdf
 - Gillette, E., O'Brien, H. L., & Bullard, J. (2011). Exploring technology through the design lens: A case study of an interactive museum technology. In H. Bruce & J. Grudin (Co-Chairs), *Proceedings of the 2011 iConference* (pp. 583–590), Seattle, WA, February 8-11, 2011. New York, NY: ACM. <https://doi.org/10.1145/1940761.1940840>
 - Rieger, O. Y. (2008). Opening up institutional repositories: Social construction of innovation in scholarly communication. *Journal of Electronic Publishing*, 11(3). <https://doi.org/10.3998/3336451.0011.301>
- Class activities this week:
 - Share and Discuss: Technology Across Information Organizations: *Libraries, archives, museums, and other information organizations all adopt and use what we have broadly considered “LIS technologies” this term. However, given the differences in these organizations their adoption and use may be different. What are some of the differences one must consider when analyzing the adoption and use of technology in different types of information organizations? What are some of the similarities and common lessons you see emerging? Would a particular perspective be appropriate across all information organizations, or only to some? Why or why not?*

Week 13 - Share and Discuss Mar 30 - Apr 2 9pm

Online communities and culture

- LIS Technology Case Studies due Apr 3 9pm
- Readings this week:
 - Kazmer, M. M., Lustria, M. L. A., Cortese, J., Burnett, G., Kim, J.-H., Ma, J., & Frost, J. (2014). Distributed knowledge in an online patient support community: Authority and discovery. *Journal of the Association for Information Science and Technology*, 65(7), 1319–1334. <https://doi.org/10.1002/asi.23064>
 - Massanari, A. (2017). #Gamergate and The Fappening: How Reddit’s algorithm, governance, and culture support toxic technocultures. *New Media and Society*, 19(3), 329-346. <https://doi.org/10.1177/1461444815608807>
 - Albretchtslund, A.-M. B. (2017). Negotiating ownership and agency in social media: Community reactions to Amazon’s acquisition of Goodreads. *First Monday*, 22(5). <https://doi.org/10.5210/fm.v22i5.7095>
- Class activities this week:

- Share and Discuss: Technologies, Communities, and Boundaries: *In both offline and online culture, the communities we are part of and the boundaries between them can be key factors in how technology is designed, implemented, adopted, and used. Consider two different and separate communities you feel you are part of. How does the role played by technology differ between these? How is it similar? If these two communities came into contact, how might technology be adopted or used, such as by yourself, to help them get along and bridge their boundaries? How might technology design or use cause or resolve conflicts in their practices and values?*

Week 14 - Case Study Discussions Apr 5-8 9pm

Group case study discussions

- No readings this week!
- Class activities this week:
 - Groups should lead discussions of their own case study and look at the other two they have been assigned to. Note that this week, discussions begin on Sunday April 5 and run through Wednesday April 8 (the official last day of classes).
 - Final wrap-up