

**University of Maryland**

**College of Information Studies**

**INST 641: Policy Issues in Digital Curation**

**Course Syllabus**

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Class Time: Wednesdays, 6:00 – 8:45 pm  
Classroom: Hornbake 1112  
Office hours: Wednesdays, 3:00 – 5:00 pm

**A. Catalog Description:** Discussion of strategies to address intellectual property, privacy, security and other policy concerns raised by the curation of digital records and data.

**B. Course Overview:** Policy Issues in Digital Curation will explore responses to the intellectual property, privacy, and security issues related to curation and long-term preservation of digital information. Bridging law, social science, computer science, and professional practice, this course will focus on understanding and responding to copyright and other forms of intellectual property raised by preservation copies of digital data and records; dealing with complex privacy issues in digital data and records; securing integrity and trust in digital information and content throughout the information lifecycle; and implementing security for digital information in a range of contexts. Applied group and individual work will focus on developing policy and technical responses to intellectual property, privacy, trust, and security issues.

**C. Learning Outcomes:** Upon completion of this course students will be able to:

- Demonstrate broad understanding of major information policy issues in the curation of digital records and data.
- Describe why intellectual property, privacy, authenticity, security, and access requirements exist, including how expectations and policies differ between cultures and contexts.
- Evaluate policy opportunities and risks for curating digital records and data in professional and institutional settings.
- Propose policy and technical approaches to digital curation challenges in areas such as intellectual property, privacy, authenticity and trust, security, and access.
- Demonstrate knowledge of the technical and human resource dimensions of implementing and enforcing policy requirements for digital curation.

**D. Weekly Topics**

The course is organized around five broad digital policy issues – intellectual property, privacy, integrity and security, and accessibility and usability. We will begin each topic with an overview of the legal, definitional, and social issues. We will then spend a week discussing existing

responses to these policy challenges. A final week on each topic will explore how organizations and individuals can implement policy and technology strategies to meet these challenges.

- Week 1: Overview of Course and Approach
- Week 2: First challenge: Intellectual Property
- Week 3: Strategies: Intellectual Property
- Week 4: Solutions: Intellectual Property
- Week 5: Second challenge: Privacy and Security
- Week 6: Strategies: Privacy and Security
- Week 7: Solutions: Privacy and Security
- Week 8: Spring Break
- Week 9: Third challenge: Integrity and Accountability
- Week 10: Strategies: Integrity and Accountability
- Week 11: Solutions: Integrity and Accountability
- Week 12: Big Data and Open Government
- Week 13: Fourth challenge: Access, Accessibility and Usability
- Week 14: Strategies: Access, Accessibility and Usability
- Week 15: Solutions: Access, Accessibility and Usability

## **E. Course Readings**

Please read the required readings before the date for which they are listed. Getting the most out of readings is an important skill for understanding and responding to policy issues. Whether reading theoretical perspectives, persuasive arguments, or implementation studies, “close reading” is a valuable technique to learn for information policy and graduate school. Terri Senft has put together a wonderful primer on close reading, available here:

<http://tsenft.livejournal.com/413651.html>

### **Week 1: Overview of Policy Issues in Digital Curation**

- Borgman, C. L. (2012). The conundrum of sharing research data. *Journal of the American Society for Information Science and Technology*, 63(6), 1059–1078.
  - boyd, danah, & Crawford, K. (2012). Critical questions for big data. *Information, Communication & Society*, 15(5), 662–679.
  - Shilton, K. (2012). Participatory personal data: an emerging research challenge for the information sciences. *Journal for the American Society of Information Science*, 63(10), 1905–1915.
  - Flynn, Nancy. *The E-Policy Handbook: Designing and Implementing Effective E-Mail, Internet, and Software Policies*. Chapter 1: Why Every Organization Needs Electronic Rules and Policies Based on Best Practices. AND Chapter 25: e-Policy 101: How to Draft Effective e-Policies for Your Organization. New York: AMACOM, 2009.
- “Storyboards: What Is It?” [https://www.wickedproblems.com/6\\_storyboards.php](https://www.wickedproblems.com/6_storyboards.php)

### **Week 2: Challenge: Intellectual Property**

Hirtle, P. (2003). Archives or Assets? *American Archivist*, 66(2), 235–247.

U.S. Copyright Office:

*Circular 1: Copyright Basics*. <http://www.copyright.gov/circs/circ01.pdf>

*Section 107, 118: Fair Use*: <http://www.copyright.gov/fls/fl102.html>

*Section 108: Library Provisions*: <http://www.copyright.gov/docs/section108/>

ARL summaries of recent copyright lawsuits

Cambridge Press v Georgia State University: <http://www.arl.org/focus-areas/court-cases/106-cambridge-press-v-georgia-state-university>

Authors Guild v Hathi Trust: <http://www.arl.org/focus-areas/court-cases/105-authors-guild-v-hathi-trust>

Authors Guild v Google, Inc: <http://www.arl.org/focus-areas/court-cases/2469-authors-guild-v-google-inc>

Golan v Holder: <http://www.arl.org/focus-areas/court-cases/2480-golan-v-holder>

Greenberg v National Geographic Society: <http://www.arl.org/focus-areas/court-cases/2470-greenberg-v-national-geographic-society>

Guest speaker: Robin Pike

### **Week 3: Strategies: Intellectual Property**

Association of Research Libraries. (2012). *Code of best practices in fair use for academic and research libraries*. Washington, DC: Association of Research Libraries.

Dryden, J. (2011). Copyfraud or Legitimate Concerns? Controlling Further Uses of Online Archival Holdings. *American Archivist*, 74(2), 522–543.

Gracy, K. (2013). Ambition and Ambivalence: A Study of Professional Attitudes toward Digital Distribution of Archival Moving Images. *American Archivist*, 76(2), 346–373.

### **Week 4: Solutions: Intellectual Property**

Anderson, R. J. (2008). Chapter 22: Copyright and DRM. *Security Engineering: A Guide to Building Dependable Distributed Systems* (2nd ed.). Wiley.

Dickson, M. (2010). Due Diligence, Futile Effort: Copyright and the Digitization of the Thomas E. Watson Papers. *American Archivist*, 73(2), 626–636.

Creaser, C. (2010). Open Access to Research Outputs—Institutional Policies and Researchers' Views: Results From Two Complementary Surveys. *New Review of Academic Librarianship*, 16(1), 4–25.

**Browse:** Creative Commons. (2011). *The power of open*. Washington, D.C.: Creative Commons.

### **Week 5: Challenge: Privacy and Security**

Abelson, H., Ledeen, K., & Lewis, H. (2008). Chapter 5: Secret Bits: How Codes Became Unbreakable. *Blown to Bits: Your Life, Liberty, and Happiness After the Digital Explosion* (1st ed.). Addison-Wesley Professional.

Garfinkel, S. L. (2012). The Cybersecurity Risk. *Commun. ACM*, 55(6), 29–32.

- Schneier, B. (2010). The Failure of Cryptography to Secure Modern Networks. Dark Reading. <http://www.darkreading.com/blog/227700878/the-failure-of-cryptography-to-secure-modern-networks.html>
- Zimmer, M. (2010). “But the data is already public”: on the ethics of research in Facebook. *Ethics and Information Technology*, 12(4), 313–325.
- Dwork, C., & Mulligan, D. K. (2013). It’s not privacy, and it’s not fair. *Stanford Law Review Online*, 66(35). <http://www.stanfordlawreview.org/online/privacy-and-big-data/its-not-privacy-and-its-not-fair>

Guest speaker: Anne Bowser, privacy and citizen science

### **Week 6: Strategies for Privacy and Security**

- Nissenbaum, H. (2004). Privacy as contextual integrity. *Washington Law Review*, 79(1), 119–158.
- Schwartz, P. M., & Solove, D. J. (2011). The PII Problem: Privacy and a New Concept of Personally Identifiable Information. *New York University Law Review*, 86, 1814.
- Blanchette, J.-F., & Johnson, D. G. (2002). Data retention and the panoptic society: the social benefits of forgetfulness. *The Information Society*, 18(33-45).

### **Week 7: Solutions for Privacy and Security**

- Anderson, R. J. (2008). Chapter 1: What is Security Engineering? *Security Engineering: A Guide to Building Dependable Distributed Systems* (2nd ed.). Wiley.
- Dwork, C. (2011). A Firm Foundation for Private Data Analysis. *Commun. ACM*, 54(1), 86–95. doi:10.1145/1866739.1866758
- Spiekermann, S., & Cranor, L. F. (2009). Engineering Privacy. *IEEE Transactions on Software Engineering*, 35(1), 67–82.

### **Week 8: Spring Break**

Enjoy!

### **Week 9: Challenge: Integrity and Accountability**

- Baron, Jason R. & Attfield, Simon J. (2012). “Where Light in Darkness Lies: Preservation, Sensemaking, and Access Strategies for the Modern Digital Archive,” *UNESCO Memory of the World in the Digital Age Conference: Conference Proceedings*, 580-595, Vancouver, B.C.
- O’Toole, J. (2004). Archives and historical accountability: toward a moral theology of archives. *Archivaria*, 58(Fall), 3–20.
- Gurstein, M. B. (2011). Open data: Empowering the empowered or effective data use for everyone? *First Monday*, 16(2). doi:10.5210/fm.v16i2.3316
- Video: “E-discovery: Did You Know?” <http://www.youtube.com/watch?v=bWbJWcsPp1M>

Guest speaker: Jason Baron

## **Week 10: Strategies: Integrity and Accountability**

Hirtle, P. (2000). Archival Authenticity in a Digital Age. In *Authenticity in a Digital Environment* (pp. 8–23). Washington, DC: Council on Library and Information Resources. Retrieved from <http://www.clir.org/pubs/reports/pub92/hirtle.html>

Long-Lived Data Collection Task Force. "Long-Lived Digital Data Collections: Enabling Research and Education in the 21st Century." Draft. National Science Board, 2005. [http://www.nsf.gov/nsb/meetings/2005/LLDDC\\_draftreport.pdf](http://www.nsf.gov/nsb/meetings/2005/LLDDC_draftreport.pdf)

## **Week 11: Solutions: Integrity and Accountability**

Garfinkel, S. L. (2013). Digital Forensics. *American Scientist*, 101(5), 370–377.

Smith, M., & Moore, R. (2007). Digital Archive Policies and Trusted Digital Repositories. *International Journal of Digital Curation*, 2(1), 92–101.

Jantz, R., & Giarlo, M. (2007). Digital Archiving and Preservation: Technologies and Processes for a Trusted Repository. *Journal of Archival Organization*, 4(1-2), 193–213. doi:10.1300/J201v04n01\_10

## **Week 12: Big Data and Open Government**

Listen to Radiolab, “Neither Confirm Nor Deny.” <http://www.radiolab.org/story/confirm-nor-deny/>

Browse Open Data Now blog <http://www.opendatanow.com/>

Koontz, Linda. *Information Management: Implementation of the Freedom of Information Act*. Washington, DC: U.S. Government Accountability Office, 2005. <http://www.gao.gov/new.items/d05648t.pdf>

Joint class with Miriam Nisbet’s Information Policy course

## **Week 13: Challenge: Accessibility and Usability**

Shneiderman, B. (2000). Universal usability. *Communications of the ACM*, 43(5), 84–91.

Jaeger, Paul, and Bertot, John Carlo. (2010). Transparency and technological change: Ensuring equal and sustained public access to government information, *Government Information Quarterly* 27(4) 371-376.

Williams, G. H. (2012). Disability, universal design, and digital humanities. In *Debates in digital humanities*. University of Minnesota Press.

Guest speaker: Molly Schwartz, Association of Research Libraries

## **Week 14: Strategies: Accessibility and Usability**

Lazar, J., & Jaeger, P. T. (2011). Reducing barriers to online access for people with disabilities. *Issues in Science and Technology*, (Winter), 69–82.

Lazar, J., Elder, T., & Stein, M. (2013). Understanding the Connection Between HCI and Freedom of Information and Access Laws. *Interactions*, 20(6), 60–63.

Battarbee, K., Fulton Suri, J., & Gibbs Howard, S. (2013). *Empathy on the edge: scaling and sustaining a human-centered approach in the evolving practice of design*. IDEO. Retrieved from [http://www.ideo.com/images/uploads/news/pdfs/Empathy\\_on\\_the\\_Edge.pdf](http://www.ideo.com/images/uploads/news/pdfs/Empathy_on_the_Edge.pdf)

## **Week 15: Solutions: Accessibility and Usability**

Considering the user perspective. (2012, October 15). *WebAIM*. Retrieved from <http://webaim.org/articles/userperspective/>

How people with disabilities use the web: overview. (2013). *W3C Web Accessibility Initiative*. Retrieved from <http://www.w3.org/WAI/intro/people-use-web/>

## **F. Course Materials**

There is no required text for the course. All readings will be available to students online or in another accessible format. Nearly all the required journal article readings are accessible through the University's library e-journal/database holdings accessible at <http://www.lib.umd.edu>.

## **G. Assignments and Grading**

Your grade will be based on the following items:

- Classroom participation and analysis of the readings (20% of final grade)
- Group policy, storyboards and presentations (4 @ 10% each, 40% of final grade)
- Individual topic reflections (4 @ 5% each, 20% of final grade)
- Final policy implementation paper (20% of final grade)

**Group policy, storyboards and presentations** (4 @ 10% each, 40% of final grade. Due in class during the third week of each topic).

With a team, write an internal policy and storyboard a strategic plan to deal with each policy challenge within your organization.

Your policy should be short and clear and comply with the guidelines in *The e-Policy Handbook*.

A storyboard is a visual representation of the people, technology, and work processes needed to accomplish an internal policy. Storyboards should present a course of action including:

- The information and organizational context
- Description of how the policy problem applies to this context
- Proposed policy to address the challenge
- Workflows for how the policy will be implemented
- Proposed technology or systems changes to address the challenge

You will receive class time to work on this project with your team. During the first week of a topic we will spend the class exploring and discussing the policy issue. During the second week, you will receive class time to brainstorm ideas for your organization with your group. During the third week, you will present your plan to the rest of the class and we will discuss each plan. Narrate your storyboard to the class and explain to us why your solution will work.

I will assign groups and they will remain consistent over the semester.

**Individual topic reflections** (4 @ 5% each, 20% of final grade)

Write an approximately 500-word reflection on your group process, including what worked, what was challenging, and what didn't work at all, and what you learned from the experience.

**Final Policy Implementation Paper** (8-10 pages, 40% of final grade)

Choose two digital policy issues that are in tension with each other. For example, privacy and access, digital rights management and access, privacy and security, or accessibility and security may all be seen as presenting tensions and tradeoffs. Write a paper in which you weigh those tradeoffs and present a strategic plan for dealing with these tensions in any business, cultural heritage, individual or informal collaboration context you choose.

Your paper should describe:

- Why these policy issues could be considered to be in tension.
- How these tensions will affect your context's stakeholders.
- Prior work addressing these tensions.
- A strategic plan to address these tensions in your context. Consider technical needs, policy requirements, and human resource challenges.

All written materials for the course should be double-spaced, using 12-point Times New Roman font. The margins should be 1 inch on each side. Citations both in the text and in the references section must conform to the most recent APA style manual. Pages should be numbered and format should be consistent.

**H. Attendance and Expectations of Student Participation**

This class meets once a week. The course will include lecture, discussion, and group work. It is essential that every student participates in the discussions of course materials. Participation means active involvement in class discussions. Students read the assigned readings for each week **PRIOR TO THAT WEEK**. The students are expected to question, challenge, argue, and discuss issues and topics related to that session's readings.

Regular attendance and participation in this class is the best way to grasp the concepts and principles being discussed, and the best way to participate in group work. However, in the event that a class must be missed due to an illness, a reasonable effort should be made to notify the

instructor in advance of the class. If a student is absent more than once due to illness or other personal matters, please meet with the instructor to discuss plans for make-up work. Students who miss a class must make all efforts to pick up the slack with their group, as well. Please see the extensions policy below if extra time is needed due to illness.

### **I. Classroom Environment**

As a graduate seminar, the classroom environment should be professional and respectful. Discussions should be based on course readings and critical thinking. Issues of policy can involve strongly held beliefs and current political controversies. Remember--your classmates may have different perspectives on issues than you, but they still deserve your respect. As another aspect of respect in the classroom environment, turn off or mute all phones and other communication devices during each class session. If you use your laptop in the classroom, limit the usage of the computer to course-related reasons (i.e., taking notes).

### **J. Students with Disabilities**

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Disability Support Services office, and (2) discuss any necessary academic accommodation with their teachers. This should be done at the beginning of the semester.

### **K. Learning Assistance**

If you are experiencing difficulties in keeping up with the academic demands of this course, contact the Learning Assistance Service, 2202 Shoemaker Building, 301-314-7693. Their educational counselors can help with time management, reading, math learning skills, note-taking and exam preparation skills. All their services are free to UMD students.

### **L. Extensions**

Timeliness is an essential component of graduate work, and extensions will only be available during personal emergencies. Students who need to request an extension should discuss the matter in advance with the professor. If an extension is granted, the work must be submitted within the extension period to avoid grade penalties. Unexcused delays in submission of the paper will result in a deduction of a half letter grade (e.g. highest possible grade becomes an A- when a paper is one day late, B+ when two days late, etc) for each day the paper is late.

### **M. Academic Honesty**

Work submitted in this course will be individual and original, in line with the University's Academic Honor Code and Honor Pledge. Engaging in any academic dishonesty will result in consequences in line with university policies. Academic dishonesty includes but is not limited to plagiarism, cheating, buying work, multiple submissions of the same paper, forging signatures,

submitting fraudulent documents, and facilitating the academic dishonesty of others. When writing papers, be sure to carefully and thoroughly cite all materials you use in writing your paper and make sure all ideas and quotations are properly acknowledged.

**N. Office Hours & Contact Information**

My office hours are on Wednesdays from 3:00 – 5:00 in Hornbake 4121H. I can also be contacted via email at [kshilton@umd.edu](mailto:kshilton@umd.edu), and we can arrange to Skype by appointment.

*Please note: this syllabus is a guide for the course and is subject to change with advance notice.*