Department of Information Studies, University of California, Los Angeles

INF STD 240, Management of Digital Records Spring 2016 edition: The State of Paperlessness* Draft – September 2106

Course information:

Number:	INF STD 240
<i>Official Title:</i>	Management of Digital Records
IĎ:	628-241-200
Quarter:	Fall 2016
Location:	room 121, GSE&IS Bldg.
Time:	Wednesdays, 8h30am-12h00pm
Web site:	https://ccle.ucla.edu/course/view/16F-INFSTD240-1

Instructor information:

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UCLA catalog description:

Lecture, three hours. Introduction to long-term management of digital administrative, information, communications, imaging, or research systems and records. Topics include electronic recordkeeping, enterprise and risk management, systems analysis and design, metadata development, data preservation, and technological standards and policy development. Letter grading.

1. Course description

Behind the dull face of 'records' and 'recordkeeping' lays one of the most profound transformation induced by computerization: the shift from paper to electronic documents in both personal and institutional life. This course draws from multiple strands of scholarship and professional practice to examine this shift: paperwork studies, documentation, media archeology, records management, computer-human interaction. While we draw from the records management literature, this course is not primarily designed to provide training in records management, but rather to provide familiarity with the multiple ways in which the switch to electronic documents changes the evidentiary landscape.

^{*} This syllabus has greatly benefited from discussions with and from syllabi created by Professors Anne Gilliland and Michele Caswell, UCLA, Cal Lee, UNC Chapel-Hill, and David Wallace, U Michigan.

The enshrinement of the terms "hanging chads" and "birthers" into popular culture testifies to the traumatic character of our current transition from paper to electronic records. In both cases, the legitimacy of the most powerful office on Earth has been threatened by doubts over the authenticity of records supposed to testify truthfully, to a birth, to a voter's intent. The remedies deployed to correct these technological failures — electronic voting machines, an Internet scan of Obama's short-form certificate — have only signaled even more powerfully the loss of the ways by which documents convey their authority and authenticity, formally and informally.

This loss is a direct consequence of the current society-wide shift in the ways documents are created, communicated, classified, and preserved. Today, almost all documents are computerized at some point of their life cycle, and the integration of computing, imaging and printing technologies makes it easier than ever to scan, copy, alter, distribute, print and store high quality documents. If the moral authority of paper records has correspondingly diminished, the electronic documents replacing them appear to us even more malleable.

This has far-reaching consequences: paper (and paperwork) is essential to the day-to-day operation of the Nation State — from the constitution itself, to all manners of paperwork — but also to the operation of daily life — from birth certificates to purchase receipts. Furthermore, new genres of communication and documentary practices — emails, text messages, social media —with shifting contours and a fast mutating metabolism are already called to serve as historical and legal evidence.

If this wasn't enough, access to electronic records is necessarily mediated by computing software and hardware and the preservation of their evidential characteristics presents significant challenges. For certain types of digital objects, there does not exist theoretical, technical, and/or practical consensus on the most appropriate (or even basic) records preservation strategy. Even when such strategies exist, the required behavioral, organizational, institutional and professional underpinnings are generally not yet in place for such strategies and technological solutions. Given this, electronic records management issues go beyond mere technological evolution of banal bureaucratic instruments. Their digitization inevitably entails the renegotiation of their power to testify truthfully, to apportion liability, to enforce accountability, to constitute individual and collective memory. As such, this process raises both profound theoretical and practical challenges, offering abundant professional and research opportunities.

In this course, we will familiarize ourselves with these challenges and opportunities, survey preliminary solutions, research, and initiatives. We will focus on four emergent issues — new genres, identity, preservation, and forgetting — and in the process, build up a set of concepts, tools and strategies information professionals can use to help shape valuable and sustainable recordkeeping systems. We will however keep these ambitions in check by taking stock of the reality of our current electronic recordkeeping environment. We will focus on guerilla recordkeeping, in the context of institutions or individuals with limited means, budgets, resources, and expertise. As such, the course will focus on grasping the essentials of a rapidly moving field and prepare students to become effective in a broad range of recordkeeping contexts.

2. Goals and objectives

This course will prepare participants for a wide range of opportunities in areas of professional practice that relate to records management, knowledge management, archives, user experience design, service design, information governance, electronic discovery, and others. Upon satisfactory completion of this course, participants will have demonstrated their understanding of, and ability to:

- identify the various types and functions of electronic systems created and maintained by organizations and individuals in the conduct of their activities;
- to discuss the roles of various stakeholders in the management of the electronic materials created by those systems;
- o discuss differences between records and other forms of digital materials;
- define the following terms or concepts: "electronic records," "evidence," "reliability," "authenticity," and "recordkeeping metadata;"
- o identify sources of warrant for electronic recordkeeping;
- o establish and present a business case for recordkeeping;
- undertake a business process analysis and develop practical strategies for organizations to meet their record management needs and requirements;
- identify and discuss a range of organizational variables as they might affect an institution's programmatic strategies with regards to electronic records;
- to frame and articulate to archivists and non-archivists the technical, theoretical, legal, and historical issues associated with the long-term administration of electronic records;
- demonstrate the relationship of records management and archival science to other professions in this context.

Course participants will have also demonstrated understanding of the value and improved performance of so-called "soft skills", ¹ including:

- o public speaking (individually and in a group);
- clear and organized writing in professional genres, including business reports;
- interpersonal collaborative skills, including providing constructive and respectful feedback in both oral and written form;
- o leadership, initative, creativity and problem-solving;

¹ See Davidson, Kate. "Employers find 'Soft Skills' like critical thinking in short supply," *Wall Street Journal*, August 31 2016. Seel also Peter Block, *Flawless Consulting*, for a fuller description of soft skills and why they matter.

• project planning.

3. Course expectations

- While these courses are not formally required, I will assume that the fundamentals of records, recordkeeping, and digital preservation have been reviewed in either IS 431, "American Archives and Manuscripts," IS 233 "Records and Information Resources Management," or IS 289, "Digital Preservation" and focus on the aspects of these issues most germane to electronic records.
- Come to class prepared to discuss the readings. Three useful resources that can help you deal with the issue of how to absorb rapidly large quantities of written materials are:
 - Paul N. Edwards, "How to Read a Book." (http://pne.people.si.umich.edu/PDF/howtoread.pdf);
 - Pierre Bayard, *How to talks about books you haven't read*. (Bloomsbury, 2009)
 - Rayner, Schotter, Masson, Potter, and Treiman, "So much to read, so little time: How do we read, and can speed reading help?" *Psychological Science in the Public Interest*, 17(1):4-34.
- This course will explore new and rapidly evolving issues. Often, little consensus has emerged as to the best course of action. This has two distinct implications:
 - a. Participate in discussions. In particular, speak up when you disagree. A classroom is a space for discussion, not just a lecture. You are thus particularly encouraged to question the assumptions of the readings, the instructor, and your fellow students, as long as you do so respectfully (more essential soft skills!)
 - b. Do not expect this course to provide you with a definitive (static) picture of the field. Rather, it will provide you with fundamental concepts together with the identification of a series of fault lines that are actively putting pressure on those concepts, questionning and transforming their meaning or practice. It will be your responsibility to keep those evolving concepts and practices on your radar screen, actively seek out additional information as needed, and consequently adjust your understanding and positions.
- Forfeit the use of your laptop and other electronic devices during class time, except for group work, as they impact the entire class' focus and attention.
- Written work should be of high quality. If you have concerns about writing, address them early. A useful resource is UCLA's Graduate Writing Center (<u>http://gsrc.ucla.edu/gwc/</u>).
- Assignments must be turned in according to the scheduled due dates. In particular, <u>no incompletes will be given.</u>
- Attend class every week, starting at 8h30am (that is, not 8h45 or 9h). If you must miss a class, please inform the instructor and provide him with a 3-page synthetic summary of the assigned readings by the start of the following

class. Repeated absence, for whatever reason, is incompatible with successful performance in this course.

- Be reasonably available for group meetings outside of class time; accept with grace and humor the inevitable compromises entailed by group work and enbrace such work as an opportunity to develop collaborative skills that are essential in the professional world.
- If you feel that you may need an accommodation for a disability or have any other special needs, make an appointment to discuss this with either of the instructors. We will best be able to address special circumstances if we know about them early in the term. The website for the UCLA Office for Students with Disabilities (www.osd.ucla.edu) contains a wealth of useful information as well as official policies about this issue.
- Classes are held in relatively small rooms with limited air circulation.
 Accordingly, please refrain from using perfume, cologne, and other fragrances in amounts that impact the comfort of other course participants.

4. Required readings

- 1. Nicholas A. Basbanes, On Paper, Vintage, 2014.
- 2. Abigail Sellen and Richard Harper, *The Myth of the Paperless Office*, MIT Press, 2003.

Both books are available at the UCLA bookstore or through online retailers at sharply reduced costs.

5. Course assignments

Grades will be assigned based upon the level of critical and original thinking, depth of analysis of real-life situations, professional presentation of assignments, and class participation (30%).

1. Take-home midterm: 20%

You will have 24 hours to write a two-page essay answering a short question relative to paperlessness.

2. Case study analysis: 50%

Working in groups of 2 or 3, you will identify an organization, group or individual which is undergoing a transition from paper to electronic records. This can be as institutional as UCLA's Opus system or as informal as a friend of yours signing up for electronic gas bills. You will analyze the situation and offer recommendations for a smooth transition. The final report should include, at a minimum, an analytical discussion of the issues relative to (a) workflow (b) compliance; (c) user experience; (d) costs; (e) change management; and (f) impact on values such as openness, transparency, accountability, social memory, etc.

The assignment will consist of 4 distinct elements:

- 1. A cover letter/executive summary that articulates both the rationale and the main recommendations for the report;
- 2. An introduction that situates the system under investigation into its broader context (e.g., social, cultural, technological);

- 3. The report itself, including an executive summary;
- 4. A poster presentation suitable for presentation at a conference. Resources regarding the design of conference posters will be available on the course website. The posters will be displayed and judged in the IS Department lounge during week 10.

You will report back to the rest of the class on **Week 3** about the case study you have selected, and on **Week 6** on your progress.

There are only 9 weeks in the term to work on this project. You must begin immediately and work throughout the term for the project to produce quality work.

5. Course schedule

Week 1 (September 28): Introduction, overview, definitions

What does paperlessness look like today? If we accept the idea that paper is here to stay, the question becomes interesting as an entry point into the particular configurations of paper and electronic media that we are living in.

Week 2 (October 5): Genres: Email and Social Media

Readings

- Basbanes Chapter 1-3; Sellen & Harper chapter 2;
- Wallace, David A. "Electronic Records Management Defined by Court Case and Policy." *Information Management Journal* 35, no. 1 (2001): 4, 6-8, 10, 12, 14-15.
- NARA, NARA Guidance on Managing Records in Web 2.0/Social Media Platforms, October 20, 2010.
- Browning, John G. "Digging for the Digital Dirt: Discovery and Use of Evidence from Social Media Sites." *SMU Sci. & Tech. L. Rev.* 14 (2010): 465.

Week 3 (October 12): Genres: Data

Readings:

- Basbanes Chapter 4-5; Sellen & Harper chapter 3;
- Thurston, A. C. (2012). Trustworthy records and open data. *The Journal of Community Informatics*, 8(2).
- Gosh, Tanu. "Fear and Desire in Database Creation." *ICIS 2006 Proceedings*, 2006, 91.
- Trace, Ciaran B. "What Is Recorded Is Never Simply 'what Happened': Record Keeping in Modern Organizational Culture." Archival Science 2, no. 1–2 (2002): 137–59.
- Abigail J. Sellen and Steve Whittaker. 2010. Beyond total capture: a constructive critique of lifelogging. *Commun. ACM* 53, 5 (May 2010).
- The paper from Jérome Denis and ...

Activity:

Week 4 (October 19): Technology: Files and Formats

- Basbanes Chapter 6-7; Sellen & Harper chapter 3;
- Bergman, O., Whittaker, S., & Falk, N. (2014). Shared files: The retrieval perspective. *Journal of the Association for Information Science and Technology*, *65*(10), 1949-1963.

Activity: guest speaker, Mary Behshid (MLIS 2009), Records Manager and Group Supervisor, NASA JPL.

Week 5 (October 26): Technology: Storage and Preservation

- o Basbanes Chapter 8-9; Sellen & Harper chapter 4;
- Luciana Duranti, "Archives and Records in the Commercial Cloud", in Christopher S. Yoo and Jean-François Blanchette (eds.) *Regulating the Cloud: Governance for Computing Infrastructure* (MIT Press, forthcoming).
- Lavoie, Brian F. "The Open Archival Information System Reference Model: Introductory Guide." OCLC and Digital Preservation Coalition, 2004.

Activity: in-class mid-term.

Week 6 (November 2): Methods: Processes and strategies

- Basbanes Chapter 10-12; Sellen & Harper chapter 5;
- DIRKS Manual (Part I, browse Part II & 3)
- Young, Jeanne. "Electronic Records Management on a Shoestring: Three Case Studies." *Information Management Journal* 39, no. 1 (2005): 58-60.
- Cook, Terry: Byte-ing Off What You Can Chew: Electronic Records Strategies for Small Archival Institutions: http://www.aranz.org.nz/Site/publications/papers_online/terry_cook_pap er.aspx
- Cal Lee, "Guerilla ERM: Lessons Learned from Some Time in the Trenches," <u>http://www.ils.unc.edu/callee/guerrila_erm.htm</u>

Activity: guest speakers: Stephen Kowalski and Preston Miller, Modern Broker.

Week 7 (November 9): Methods: Design for Hybrid Systems

• Basbanes Chapter 13-14; Sellen & Harper chapter 6;

- Maja Köpper, Susanne Mayr and Axel Buchner, "Reading from computer screen versus reading from paper: does it still make a difference?. *Ergonomics* 59:5, 615-632.
- Ishita Gosh, Jay Chen, Joy Ming & Assza Abouzied, "The Persistence of Paper: A Case Stuy in Microfinance from Ghana," ICTD'15, May 15-18 Singapore.
- Judith Enriquez-Gibson, "Papier-mach(i)ne: Thinking with "sticky" paper in the cloud", *British Journal of Educational Technology* 46(6):1354-1366.
- Barley, S. R., Meyerson, D. E., & Grodal, S. (2011). E-mail as a source and symbol of stress. *Organization Science*, 22(4), 887-906.

Activity: guest speaker, Pilar McAdams CRM ERMM, Information Governance Partner at Kaizen InfoSource.

Week 8 (November 16): Values: Transparency, Accountability, Sustainability

- Basbanes Chapter 15-16; Sellen & Harper chapter 7;
- Slavoj Žižek, "Good Manners in the Age of WikiLeaks," London Review of Books, Vol. 33, no. 2, pages 9-10. <u>http://www.lrb.co.uk/v33/n02/slavojzizek/good-manners-in-the-age-of-wikileaks</u>
- o Larry Lessig, "Against Transparency," *The New Republic*, October 9, 2009.
- Justin G. Bull, Robert A. Kozak, "Comparative life cycle assessments: The case of paper and digital media. *Environmental Impact Assessment Review* 45(2014): 10-18.

Week 9 (November 23): Values: Forgetting and Memory

- Basbanes Chapter 17-18 + epilogue
- David Segal, "Mugged by a Mug Shot Online," *The New York Times*, October 5, 2013, pp. BU1. <u>http://www.nytimes.com/2013/10/06/business/mugged-by-a-mug-shot-online.html</u>
- Nick Bilton, "Erasing the Digital Past," *The New York Times*, April 1, 2010.
- Jeffrey Rosen, "The Web means the end of forgetting," *The New York Times Magazine*, July 21, 2010.
- David O. Stephens, "Records Retention and the Law," chapter 7 in *Records Management: Making the Transition from Paper to Electronic*, ARMA International, 2007, p. 103-123.
- Blanchette, J.-F., "The Noise in the Archive: Oblivion in the Age of Total Recall, " in *Privacy and Data Protection : An Element of Choice*. (Serge Gutwirth, Yves Poullet, Paul De Hert, and Ronald Leenes, Eds.), pp. 25-38. Springer, 2011.
- Bernal, P. (2014). The EU, the US and Right to be Forgotten. In *Reloading Data Protection* (pp. 61-77). Springer Netherlands.