We acknowledge that we are on the traditional, ancestral and unceded territory of the hən̓q̓əmin̓əm̓ speaking Musqueam people.

The mission of UBC iSchool is to enhance humanity's capacity to engage information in effective, creative and diverse ways, through innovative research, education and design.

ARST 555 The Preservation of Digital Records – Course Syllabus (3)

Program: Master of Archival Studies
Year: 2019-2020 Winter Session, Term 1
Course Schedule: Monday 2:00-4:50
Location: IKBLC #155
Instructor: Luciana Duranti
Office location: SLAIS #478
Office phone: 604-822-2587
Office hours: Mondays 12:50-1:50; otherwise, available for quick questions after class and during the break, or by appointment; consistently available by email.
E-mail address: luciana.duranti@ubc.ca
Learning Management Site:
http://lthub.ubc.ca/guides/canvas/

Course Goal: The goal of this course is to give students an opportunity to build on basic knowledge acquired in the first year courses by exploring in depth issues concerning the management and preservation of digital records by the creating organization/individual and its legitimate successor, such as an archival program or institution.

Course Objectives: Upon completion of this course students will be able to:

1. demonstrate an in-depth appreciation of the challenges presented to both records creators and records preservers by the adoption of digital technology for records creation, maintenance and preservation (1.1)
2. address such challenges through proper planning and strategizing (1.2.1, 1.2.2, 1.2.3, 1.2.4)
3. select, among a variety of recommended and/or implemented methods for ensuring the preservation of digital records, the most appropriate for a specific institution or body of records (1.4, 1.5, 1.6, 2)
4. demonstrate familiarity with recent and current research on the preservation of digital records as well as the entire body of relevant literature (3)
5. approach new and unforeseen digital records issues from a solid knowledge of concepts and principles (2.1, 2.2, 2.3)

Course Topics:

1. concepts and principles involved in the creation, management and preservation of digital records
2. existing policies, standards, practices and systems for the creation, management and preservation of digital records
3. the creation, management and preservation of digital records by individuals, communities of practice, small businesses and unstructured organizations (e.g. universities)

4. management frameworks for digital records by structured records creating organizations
5. management frameworks for the preservation of digital records by archival units/organizations/institutions
6. theory and methods for the management and preservation of digital records developed by contemporary research projects and discussed in the pertinent literature

Prerequisites: MAS and Dual Students: completion of the MAS core courses and ARST 520. MLIS students: completion of **both the MLIS and MAS cores**, plus permission of the SLAIS Graduate Adviser

Format of the course: The class meets for three hours each week. The format of the course consists of lectures accompanied by in-class discussion, and students' presentations followed by Q&A.

Required and Recommended Reading: (note: The *Archivaria* and *American Archivist* articles are all available on the related websites; other readings are available on the restricted site of my website www.lucianaduranti.ca (username and password will be provided on the first day of class). Most of my relevant writings can be found on https://ubc.academia.edu/LucianaDuranti/

Required Readings:
1. Brown Adrian (2007), *Archiving Websites* (London: Facet Publishing) --- Look also at Library of Congress. "Web Archiving." http://www.loc.gov/webarchiving/preservable.html; Smithsonian Institution Archives. "Web and Social Media Preservation: Capturing Today's Websites for Future Archival Research." August 12, 2014. https://siarchives.si.edu/blog/web-and-social-media-preservation-capturing-today%E2%80%99s-websites-future-archival-research; "IIPC | International Internet Preservation Consortium." http://netpreserve.org/; Library of Congress. "Websites, Blogs, Social Media - Personal Archiving" http://digitalpreservation.gov/personalarchiving/websites.html
2. Canadian General Standards Board (2017), *Electronic Records as Documentary Evidence* (CAN/CGSB-72.34-2017)
3. Consultative Committee for Space Data Systems (2012), *Reference Model for an Open Archival Information System (OAIS)*. Magenta Book (Washington, D.C.: CCSDS Secretariat). https://public.ccsds.org/pubs/650x0m2.pdf --- Look also at Trustworthy Repositories Audit and Certification (TRAC): Criteria and Checklist (2007) http://www.crl.edu/sites/default/files/d6/attachments/pages/trac_0.pdf and "ISO 16363 / TDR | CRL." (2011) https://www.crl.edu/archiving-preservation/digital-archives/metrics-assessing-and-certifying/iso16363
4. Duranti, Luciana and Corinne Rogers, eds., (2019), *Trusting Records in the Cloud* (Facet Publishers and the Society of American Archivists. London, UK and Chicago, Ill.)
5. Duranti, Luciana (2009), "From Digital Diplomatics To Digital Records Forensics," *Archivaria* 68: 39-66.
6. Duranti, Luciana and Kenneth Thibodeau (2006), "The Concept of Record in Interactive, Experiential and Dynamic Environments: the View of InterPARES," *Archival Science* 6(1): 13-68. Online at http://www.interpares.org/ip2/display_file.cfm?doc=ip2_book_appendix_02.pdf
7. Duranti, Luciana (2002), "Authenticity and Appraisal: Appraisal Theory Confronted With Electronic Records," in *Proceedings of the 3rd International Colloquium on Library and Information Science: "The Refined Art of Destruction: Records' Appraisal and Disposal." October 9-11, 2002. Salamanca, Spain* (Salamanca : University of Salamanca)
8. Eastwood, Terry (1996), "Should Creating Agencies Keep Electronic Records Indefinitely?" *Archives and Manuscripts* 24(2): 256-267.

9. Evans, Joanne, Sue McKemmish and Karuna Bhoday (2006), "Create Once, Use Many Times: The Clever Use of Recordkeeping Metadata for Multiple Archival Purposes," *Archival Science* 5: 17-42

10. Lois Evans, Patricia C. Franks and Michelle Chen (2019), "Voices in the Cloud: Social Media and Trust in Canadian and US Local Governments," *Records Management Journal* 28 No. 1: 18-46.

11. Hofman, Darra, et al. (2019), "The margin between the edge of the world and infinite possibility. Blockchain, GDPR and information governance," *Records Management Journal* 29, 1-2: 240-257.

12. Hurley, Grant (2016), "Community Archives, Community Clouds: Enabling Digital Preservation for Small Archives," *Archivaria* 81 (Spring): 129-150

13. MacNeil, Heather (2000), "Providing Grounds for Trust: developing conceptual requirements for the long-term preservation of authentic electronic records," in *Archivaria* 50 (Fall): 52-78.

14. MacNeil, Heather (2002), "Providing Grounds for Trust II: The Findings of the Authenticity Task Force of InterPARES," in *Archivaria* 54 (Fall): 24-58 --- read also Lemieux, Victoria Louise. "Trusting Records: Is Blockchain Technology the Answer?" *Records Management Journal* 26, no. 2 (July 18, 2016): 110–39. doi:10.1108/RMJ-12-2015-0042.

15. MacNeil, Heather (1995), "Metadata Strategies and Archival Description: Comparing Apples and Oranges," *Archivaria* 39 (Spring): 22-32 – Look also at Library of Congress and PREMIS Editorial Committee. "PREMIS Data Dictionary for Preservation Metadata, Version 3.0. http://www.loc.gov/standards/premis/v3/; ISO 23081-1:2006(en) Information and documentation — Records management processes — Metadata for records — Part 1: Principles https://www.iso.org/standard/40832.html; ISO 23081-2:2009 Information and documentation -- Managing metadata for records -- Part 2: Conceptual and implementation issues https://www.iso.org/standard/50863.html; ISO/TR 23081-3:2011 Information and documentation -- Managing metadata for records -- Part 3: Self-assessment method https://www.iso.org/standard/57121.html

16. McLellan, Evelyn (2006), "InterPARES 2 Project - General Study 11 Final Report: Selecting Digital File Formats for Long-Term Preservation." Online at http://www.interpares.org/display_file.cfm?doc=ip2_file_formats(complete).pdf --- Look also at Archives, The National. "PRONOM | Welcome." https://www.nationalarchives.gov.uk/PRONOM/Default.aspx

17. Rothenberg, Jeff (1999), Avoiding Technological Quicksand: Finding a Viable Technical Foundation for Digital Preservation (Washington, D.C.: CLIR). Online at http://www.clir.org/PUBS/reports/rothenberg/pub77.pdf

18. Duranti, Luciana and Corinne Rogers. (2012), "Trust in digital records: An increasingly cloudy legal area," *Computer Law & Security Review* 28.5: 522-531. Look also at the PaaST model (it will be provided)

19. Zhang, Jane and Dayne Mauney (2013), "When Archival Description Meets Digital Object Metadata: A Typological Study of Digital Archival Representation," *The American Archivist* 76,1: 174-195

20. Force, Donald (2014), "The Admissibility of Business Records as Legal Evidence: A Review of the Business Records Exception to the Hearsay Rule in Canada," *Archivaria* 78 (Fall): 25-51

Recommended Readings:

- Amelia Acker and Jed R. Brubaker (2014), "Death, Memorialization, and Social Media: A Platform Perspective for Personal Archives," *Archivaria 77:* 1-23
- Bak, Greg (2016), "Media and the Messengers: Writings on Digital Archiving in Canada from the 1960s to the 1980s," *Archivaria* 82: 55-81.
- Bass, Jordan (2013), "A PIM Perspective: Leveraging Personal Information Management Research in the Archiving of Personal Digital Records," *Archivaria* 75: 49-76

- Becker, Christoph (2018), "Metaphors We Work By: Reframing Digital Objects, Significant Properties, and the Design of Digital Preservation Systems," *Archivaria* 85: 7-36
- Becker, David and Collier Nogues (2012), "Saving Over, Over-Saving, and the Future Mess of Writers' Digital Archives: A Survey Report on the Personal Digital Archiving Practices of Emerging Writers," *The American Archivist* 75, 2: 514-537
- Belovari, Susanne (2017), "Historians and Web Archives," *Archivaria* 83: 59-79.
- Benoit, Edward III (2017), "#MPLP Part 1: Comparing Domain Expert and Novice Social Tags in a Minimally Processed Digital Archives." *The American Archivist,* 80, 2: 407-438.
- Benoit, Edward III (*2018*), "#MPLP Part 2: Replacing Item-Level Metadata with User-Generated Social Tags," *The American Archivist*: 81, 1: 38-64.
- Bushey, Jessica (2016), *The archival trustworthiness of digital photographs in social media platforms.* https://open.library.ubc.ca/cIRcle/collections/ubctheses/24/items/1.0300440.
- Cocciolo, Anthony (2016), "When Archivists and Digital Asset Managers Collide: Tensions and Ways Forward," *The American Archivist* 79, 1 (Spring/Summer): 121-136.
- Cunningham, Adrian (2011), "Good Digital Records Don't Just "Happen": Embedding Digital Recordkeeping as an Organic Component of Business Processes and Systems," *Archivaria* 71: 21-34.
- Daines, Gordon, J. III (2011), "Re-engineering Archives: Business Process Management (BPM) and the Quest for Archival Efficiency," *The American Archivist* 74: 123-157.
- Department of Defense (2007), *DoD 5015.2 STD, Design Criteria Standard for Electronic Records Management Software Applications*. http://www.dtic.mil/whs/directives/corres/pdf/501502std.pdf
- Dollar, Charles (1978), "Appraising Machine-Readable Records," *The American Archivist* 41: 423-430.
- Duff, Wendy (1996), "Ensuring the Preservation of Reliable Evidence: A Research Project Funded by the NHPRC," *Archivaria* 42: 28-45
- Duranti, Luciana (1997), "The Thinking on Appraisal of Electronic Records: Its Evolution, Focuses, and Future Directions," *Janus* 2: 47-67.
- Duranti, Luciana and Heather MacNeil (1996), "The Protection of the Integrity of Electronic Records: An Overview of the UBC-MAS Research Project," *Archivaria* 42: 46-67
- Duranti, Luciana and Randy Preston, eds. (2008), Selected readings from *International Research on Permanent Authentic Records in Electronic Systems (InterPARES) 2: Experiential, Interactive and Dynamic Records* (Padova, ANAI). Online at http://www.interpares.org/ip2/book.cfm
- Duranti, Luciana, Terry Eastwood and Heather MacNeil (2002), *Preservation of the Integrity of Electronic Records* (Dordrecht: Kluwer Academic Publishers Group). Link to the research project originating the book: http://www.interpares.org/UBCProject/index.htm
- European Commission, *Model Requirements for the Management of Electronic Records (MoReq2)*, http://www.project-consult.net/Files/MoReq2_body_v1_0.pdf
- European Commission, DLM Forum Foundation, *Modular Requirements for Records Systems (MoReq10), http://moreq.info/*
- Fear Kathleen (2010), "User Understanding of Metadata in Digital Image Collections: Or, What Exactly Do You Mean by "Coverage"?" *American Archivist* 73, 1: 26-60.
- Hamer, Alyssa (2018), "Ethics of Archival Practice: New Considerations in the Digital Age," *Archivaria* 85: 156-179.

- ICA (2008), *Principles and Functional Requirements for Records in Electronic Office Environments. Modules 1-3, http://e-records.chrisprom.com/ica-guidelines-and-functional-requirements-for-electronic-records-management-systems/*
- Klareld Ann-Sofie, Katarina L. Gidlund (2017), "Rethinking Archives as Digital: The Consequences of "Paper Minds" in Illustrations and Definitions of E-archives, *Archivaria* 83:81-108.
- Valerie Léveillé, Katherine Timms (2015), "Through a Records Management Lens: Creating a Framework for Trust in Open Government and Open Government Information / Les objectifs visés par les systèmes de gestion documentaires : La mise en place d'un cadre de confiance et de la transparence de l'information dans un gouvernement ouvert,"*Canadian Journal of Information and Library Science,* 39, 2: 154-190
- Levi, Charles. (2011), "Five Hundred 5.25-Inch Discs and One (Finicky) Machine: A Report on a Legacy E-Records Pilot Project at the Archives of Ontario," *Archivaria* 72: 239–246
- Monks-Leeson, Emily (2011), "Archives on the Internet: Representing Contexts and Provenance from Repository to Website," *The American Archivist* 74: 38-57.
- Mumma, Courtney, Glenn Dingwall and Sue Bigelow (2011), "A First Look at the Acquisition and Appraisal of the 2010 Olympic and Paralympic Winter Games Fonds: or, SELECT * FROM VANOC_Records AS Archives WHERE Value="true";" *Archivaria* 72: 93–122
- Niu, Jinfang (2016), "Linked Data for Archives," *Archivaria* 82: 83-110.
- Sheffield. Rebecka (2018), "Facebook Live as a Record*making* Technology," *Archivaria* 85: 96-121.
- Trace, Ciaran (2011), " Beyond the Magic to the Mechanism: Computers, Materiality, and What It Means for Records to Be "Born Digital"," *Archivaria* 72: 5–27
- Williams, Joseph A. and Elizabeth M. Berilla (2015), "Minutes, Migration, and Migraines: Establishing a Digital Archives at a Small Institution," *American Archivist* 78,1: 84-95
- Xie, Sherry (2012), "Building Foundations for Digital Records Forensics: A Comparative Study of the Concept of Reproduction in Digital Records Management," *The American Archivist* 75, 2: 576-599
- Zhang, Jane (2012), "Original Order in Digital Archives," *Archivaria* 74: 167–193

Recommended Web Sites:
- Center for the International Study of Contemporary Records and Archives (CISCRA): www.ciscra.org
- International research on Permanent Authentic Records in Electronic Systems (InterPARES): www.interpares.org
- InterPARES Trust: www.interparestrust.org
- Blockchain at UBC: https://blockchainubc.ca/

You can find a list of additional sites on the restricted area of my site www.lucianaduranti.ca

Recommended Books:
- Philip Bantin ed. (2016), *Trustworthy Systems for Digital Objects: Theory and Practice* (Lanham, MD: Rowman & Littlefield Publishing Group)
- Jean-François Blanchette (2012), *Burden of Proof* (The MIT Press)
- Caroline Brown ed. (2018) *Archival Futures* (London, UK: Facets)
- John Vacca ed. (2016), *Security in the Private Cloud* (London, UK: CRC Press, Taylor & Francis Group, LLC)

- Christopher S. Yoo and Jean-François Blanchette eds. (2015), *Regulating the Cloud: Policy for Computing Infrastructure (Information Policy)* (Cambridge, Mass.: The MIT Press)

Course Assignments

Assignment Name	Due Date	Weight	Graduate Competencies
Class Presentation	As assigned	30%	2.1, 3.2
In-class participation and discussion based on the required readings for the course and those you may have chosen to read among the recommended ones.		20%	2.1, 3.1
Final paper: A critical extended essay of about 3000 (without the footnotes) words on a relevant topic proposed by you and accepted by the instructor (to be submitted in digital form: PDF for authenticity and Word for ease of editing and commenting)	December 6 (midnight)	50%	1.1, 1,6, 2.1.1, 3

Course Schedule

Date	Topics and Assignments
9 Sept.	Corinne Rogers guest lecturer. Introduction to the course. Discussion of the required and recommended readings, web sites, etc.
16 Sept.	Concepts, principles and methods guiding the reliable and accurate creation of digital records that can be preserved
24 Sept.	Concepts, principles and methods guiding the accurate and authentic maintenance of digital records. Standards and models related to digital recordkeeping
30 Sept.	Concepts, principles and methods guiding appraisal and preservation of digital records
7 Oct.	Corinne Rogers guest lecturer on Digital Preservation (Atom and Archivematica)
21 Oct.	Guest Speaker: Glenn Dingwall Digital Preservation at the City of Vancouver Class Presentations (3)
28 Oct.	Metadata and Archival Description Class Presentations (5)

4 Nov.	Email Preservation Class Presentations (5)
18 Nov.	Web Preservation and Social Media Class Presentations (5)
25 Nov.	Technological Authentication Cloud Computing

Attendance:

- Attendance is required in all class meetings. If you know you are going to be absent you must inform me beforehand if at all possible.
- Up to 2 excused absences are allowed with prior notification to me. Additional absences will require a note from a health professional or Access and Diversity. Failure to provide this documentation could result in a lower course mark.
- Any penalties imposed for excessive absences are at the discretion of the instructor.

Evaluation: All assignments will be marked using the evaluative criteria given on the iSchool web site. Marked work will not be re-graded. Missed in-class exam/test will involve a zero for the corresponding component of the final mark unless you have a note from a health professional or Access and Diversity.

Required Materials: All required materials are available either at the UBC Library or on my website.

Policies and Resources to Support Student Success: UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here (https://senate.ubc.ca/policies-resources-support-student-success)

Centre for Accessibility: Centre for Accessibility works with the University to create an inclusive living and learning environment in which all students can thrive. The University accommodates students with disabilities who have registered with the Centre for Accessibility unit: [https://students.ubc.ca/about-student-services/centre-for-accessibility]. You must register with the Disability Resource Centre to be granted special accommodations for any on-going conditions.

Religious Accommodation: The University accommodates students whose religious obligations conflict with attendance, submitting assignments, or completing scheduled tests and examinations. Please let your instructor know in advance, preferably in the first week of class, if you will require any accommodation on these grounds. Students who plan to be absent for family obligations, or other similar commitments, cannot assume they will be accommodated, and should discuss with the

instructor before the course drop date. UBC policy on Religious Holidays: http://equity.ubc.ca/days-of-significance-calendar/

Academic Integrity
Plagiarism

The Faculty of Arts considers plagiarism to be the most serious academic offence that a student can commit. Regardless of whether or not it was committed intentionally, plagiarism has serious academic consequences and can result in expulsion from the university. Plagiarism involves the improper use of somebody else's words or ideas in one's work. The UBC policy on Academic Misconduct is available here: http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3,54,111,959.

It is your responsibility to make sure you fully understand what plagiarism is. Many students who think they understand plagiarism do in fact commit what UBC calls "reckless plagiarism." The UBC Learning Commons has a resource page on how to avoid plagiarism, with policies on academic integrity and misconduct found here: [http://learningcommons.ubc.ca/resource-guides/avoid-plagiarism/

If after reading these materials you still are unsure about how to properly use sources in your work, please ask your instructor for clarification.

Additional Course Information: Class presentation assignments will be handed out on the first day of class.